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ABSTRACT

The purpose of this manual, which accompanies a video program, is to provide general background information for foreign language teachers who are, or soon will be, teaching in total, partial, or two-way immersion classrooms. Part of a series of video programs, this manual highlights special considerations in teaching language arts in kindergarten through the Grade 2 immersion classroom. The program describes the following phases in teaching beginning immersion students to read: preparing students to learn to read; helping students make a transition to beginning readers; implementing formalized instruction in reading; and teaching the writing process. This teacher's manual and the accompanying video may be used in a variety of ways. The viewer may first wish to read the report of the Commission on Reading "Becoming a Nation of Readers" and a related paper by Donna Gouin in the section "Background Reading," and then view the video program and complete the seven related activities included in the manual, or the viewer may wish to first watch the video, read the articles, and complete the activities in the manual. (VWL)

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TEACHING READING LANGUAGE ARTS IN THE IMMERSION CLASSROOM: GRADES K-2

El
La pelota
morrón
El fósforo

FL021171

Division of Academic Skills
Office of Instruction and Program Development
Montgomery County Public Schools
Rockville, Maryland
1990

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TEACHING READING AND LANGUAGE ARTS IN THE IMMERSION CLASSROOM:

KINDERGARTEN - GRADE 2

TEACHER'S ACTIVITY MANUAL

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Photograph by William E. Mills

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PREFACE

Video production

The production of this video program and manual was funded by a federal grant from the U.S. Department of Education, Title VI, International Research and Studies: Improving Foreign Language Methodology Through Immersion Teacher Training. This grant was developed and implemented by the Office of Instruction and Program Development, Division of Academic Skills, Foreign Languages, Montgomery County Public Schools, Rockville, Maryland, from July, 1989, to June, 1991. The activities for this grant were carried out by Eileen Lorenz, immersion resource teacher and Myriam Met, foreign language coordinator.

The production of this program would not have been possible without the cooperation and support of the elementary immersion staff and students of the three Montgomery County Public Schools immersion programs: Oak View, Rock Creek Forest, and Rolling Terrace elementary schools. Montgomery County Public Schools television services staff members also made significant contributions.

Upon request, this manual and video program will be distributed to school districts and institutions of higher education to be used for nonprofit training workshops and research projects. Requests for these materials should be accompanied by a $25 check made payable to Montgomery County Public Schools. Requests should be addressed to:

Foreign Language Coordinator
Department of Academic Skills
Montgomery County Public Schools
850 Hungerford Drive
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INTRODUCTION

Purpose of the video program and manual

The purpose of the program and manual is to provide general background information for foreign language teachers who are, or will soon be, teaching in total, partial or two-way immersion classrooms. The fifth in a series of video programs Teaching Reading and Language Arts in the Immersion Classroom: Kindergarten - Grade 2 highlights special considerations in teaching and language arts in kindergarten through Grade 2 immersion classroom. The program describes the following phases in teaching beginning immersion students to read:

- Preparing students to learn to read
- Helping students make a transition to beginning readers
- Implementing formalized instruction in reading
- Teaching the writing process

How to use the video program and manual

The Teacher's Activity Manual and the video have been designed to complement one another and may be used in a variety of ways. The viewer may first wish to read the articles found in the section, "Background Reading," and then view the video program and complete the related activities included in the manual. Or, the viewer may wish first to watch the video, read the articles and then complete the activities in the manual.

The video and accompanying activity manual may be used effectively by either one teacher or by a group of teachers. Multiple viewings to review specific sections of the video provide opportunities to use the program to support a variety of objectives.

PART I

GETTING READY TO READ

Activity 1

Getting Ready to Read - Developing a Language Base

Getting students ready to read is an exciting and challenging task for Kindergarten and first grade immersion teachers. Most beginning students come to school with little or no experience in the immersion language. Even if students have had the benefit of an immersion experience at the Kindergarten level, Grade 1 students continue to need a variety of classroom experiences that promote development of a solid language base in their new language. The immersion teacher's charge is to provide students with a wide variety of curriculum-based experiences in a context-rich environment that will develop and promote students receptive and expressive language base. Whether you're a total or partial immersion teacher, a well established language base sets the stage for successful transition to beginning reading and formalized instruction in reading in students' second language.

There are three techniques that veteran immersion teachers have identified as particularly effective in getting immersion students ready to read.

- Hands-on experiences to teach all aspects of the curriculum
- Chunks of oral language--chants, poems, and songs
- Daily, shared reading of familiar and predictable literature

Let's examine each of these techniques to see how they may be used to support the goal of getting students ready to read.

Hands-on experiences

Involving young students in hands-on experiences in science, math and social studies is a sound instructional approach to learning in an immersion classroom. It means that students participate in the learning process and are not treated as passive recipients of knowledge and language delivered by the teacher. Not only does the classroom provide the context for learning, but students also are involved with manipulating and investigating the hands-on materials selected. All learning channels are accessed while students are involved in hands-on activities--the auditory channel as students hear the teacher and classmates describe or pose questions about an activity; the visual channel as they watch the teacher and classmates demonstrate how to use and explore the materials that support the concept; and the tactile/kinesthetic channel as students themselves investigate a concept with materials selected for an activity. For example, students using clay to make circles, triangles, and rectangles listen to and watch the teacher giving them directions and showing them how to make a shape; they listen to the teacher's description of the characteristics of the shape as they model the clay; and finally as they are shaping the clay into a circle, triangle, or rectangle they are touching the rounded and straight edges and the corners.

Chunks of oral language

A second effective method to help students establish a language base is using chunks of oral language. Students easily learn chants, poems, and songs that are related to classroom activities that are taught so that students understand the meaning of what they are saying (e.g., using pictures, real objects, gestures etc.). Using movement activities that reinforce the meaning of the oral language is highly engaging and motivating. Young children enjoy reciting chants, poems, and singing, and they regard such language learning as "play" rather than "work".

Getting Ready to Read - Developing a Language Base

During the school day, there are many opportunities for students to practice chants, poems, and songs as they line up, wait in line, or travel to or from a field trip. Once students have learned these chunks of oral language, they become a part of their language repertoire, which they frequently take outside of the school setting. It's very natural for a child to sing a song or recite a poem learned in school at home; and when this happens, students are practicing the immersion language .

As students become comfortable with various chunks of oral language, recording the chant, poem, or song on chart paper, using sketches to remind student of the meaning of key phrases and words, makes familiar written language available to students. These charts are displayed in the classroom and support development of sight vocabulary. Young students enjoy "reading" familiar language as they recite or sing a chant, song, or poem they have already learned. They frequently refer to this displayed written language as they begin the transition from expressing their ideas with pictures to expressing their ideas with written language. We will discuss this transition in greater detail when we explore the writing process.

Familiar and predictable literature

Familiar and highly predictable literature read aloud to immersion students is a third tool in getting students ready to read. Reading aloud on a daily basis is an important part of your role as the immersion language model and classroom teacher. As a language model, reading aloud allows you to present new language, and demonstrate the flow and intonation of the immersion language. As a classroom teacher it allows you to model

Activity 1 - continued

Getting Ready to Read - Developing a Language Base

literacy skills and to share enjoyable stories with your students in a way that values reading. Stories such as Little Red Riding Hood and The Three Bears are frequently available in many languages; or English versions may be adapted for beginning students by covering the English words with text in the immersion language text. By selecting or adapting versions of familiar literature to read aloud to students, you will capitalize on students prior knowledge of these stories and help them to understand the immersion language. Students will be revisiting this literature in the immersion language with background knowledge about the story line, setting, characters, problems, and solutions. Careful selection of texts with attractive illustrations that effectively support the meaning of the story makes understanding easy and of course more enjoyable for young children. Stories that are highly predictable allow students to predict or guess what will happen next in the story, providing additional clues to meaning.

Additionally, many versions of familiar and predictable literature contain repetitive language. After several readings of these stories, students will begin to chime in as you read aloud sections that contain repetitive language. Students may chime in spontaneously or you may encourage them to do so by pausing at a point in the text where repetitive language is located. Repetitive language that students learn through shared readings becomes a part of their language repertoire, in much the same way as do chants, poems, and songs.

Getting Ready to Read - Developing a Language Base

But how do these three techniques--hands-on experiences, chunks of oral language and familiar literature read aloud--promote getting students ready to read? As students participate in lessons and activities planned to include these techniques, they are developing a receptive and expressive language base. Students are surrounded by oral and written language that is linked to meaning and content through experiences, objects, and representations of objects that are in the immersion environment. Written labels on familiar classroom objects, charts with pictures and written language, and bulletin boards that reflect classroom learning serve to familiarize students with print in the immersion language and to help students develop sight vocabulary. This language in the classroom environment approximates and builds on similar conditions from the environment in which students learned their first language.

Activity 1 - continued

Getting Ready to Read - Developing a Language Base

I. Imagine your kindergarten class will be working on the science objective from the unit living things: *Students will group animals according to the ways they move.* How many ways can you think of to use:

- Hands-on experiences
- Chunks of oral language-songs, poems and chants
- Daily, shared readings of familiar and predictable literature

Remember that these three techniques also are getting students ready to read. Note your ideas below and, if possible, discuss them with a colleague. Compare your ideas with those listed on the following page.

Hands-on experiences	Chunks of oral language	Familiar literature

Activity 1 - continued

Getting Ready to Read - Developing a Language Base

Let's examine some options organized around these three techniques that a veteran Kindergarten teacher considered while planning to teach the same science objective (Objective: *Students will group animals according to the way they move*). This teacher focused students' attention on creatures that walk, swim, fly and crawl and considered the options found below.

Hands-on experiences

- Use stuffed animals to introduce the concept that some animals walk, some swim, some some fly, and some crawl
- Use small plastic figures of animals to provide small groups of students with manipulatives to classify animals according to their mode of locomotion
- Take a class visit to a zoo, aquarium, or farm
- Plan an activity where students create a zoo, aquarium, or farm in the class based on the class visit (a mural, a zoo with stuffed animals, clay farm animals, etc.)
- Set up an aquarium, or a gerbil or hamster cage. Students will help care for the creatures as well as observe and draw their observations
- Use small plastic figures of animals to provide small groups of students with manipulatives to count objects, group objects into sets, and compare sets
- Use the same plastic figures to copy patterns
- Use pictures of selected animals to construct a simple pictograph comparing number of animals relying on different modes of locomotion

Chunks of oral language

- Select or create chants and mime about animals that walk, swim, fly, or crawl
- Select songs and poems about animals that walk, swim, fly, or crawl

Familiar literature

- Read aloud the story of The Tortoise and The Hare with different purposes (e.g., gist, story structure, etc.)
- Change the two main characters in the story from the tortoise and the hare to two other creatures that swim, fly, or crawl. Reread the story to students making the necessary adaptations to accommodate the change in main characters

Activity 1 - continued

Getting Ready to Read - Developing a Language Base

II. List below as many fingerplays, songs, and rhymes in your immersion language as you can think of.* Review the science, social studies, and math objectives from Montgomery County Public Schools Kindergarten, Grades I and 2 curriculum found in Appendix A. Next to each fingerplay, song, and rhyme note any content objective that can be integrated with these language activities. You may wish to use your school district's science, social studies, and math objectives rather than those listed in Appendix A.

Content objective

Fingerplays

Songs

Rhymes

* If you don't know any: research in the library, consult a colleague or a native speaker.

Activity 1 - continued

Getting Ready to Read - Developing a Language Base

III. List below titles of familiar and/or predictable literature that you might consider using in a Kindergarten through Grade 2 immersion class. Review Appendix A (science, social studies and math objectives from Montgomery County Public Schools Kindergarten, Grades I and 2 curriculum) and note next to each title any content objectives that can be integrated with these stories. You may wish to use your school district's science, social studies, and math objectives rather than those listed in Appendix A.

Titles of familiar and/or predictable literature	Content objectives

Activity 1 - continued

Getting Ready to Read - Developing a Language Base

IV. Review the science, social studies and math objectives found in Appendix A, or those from your local school district for Kindergarten through Grade 2. Ask a nonimmersion teacher to help you generate a list of hands-on experiences for these objectives. Would these activities need to be modified for an immersion class? If so, how? If not, why not?

Objective	Hands-on activities	Modification(s)

Activity 1 - continued

Getting Ready to Read - Developing a Language Base

V. Select an objective from Appendix A or from your local school district's curriculum for your grade level. On the following page list as many hands-on experiences, chants, poems, songs, and familiar/ predictable literature as you can think of to teach the selected objective. Keep in mind how each one contributes to the development of students language base in the immersion language. If possible, discuss your ideas with a colleague.

Establishing a Language Base

Grade level

Objective

Hands-on experiences

Chunks of oral language

Familiar literature

PART II

TRANSITION TO READING

PLEASE NOTE

Immersion students develop a receptive and expressive language base because they are surrounded by meaningful spoken and written language. There is, however, a significant difference between total and partial immersion students as they learn to read. In the school setting, total immersion students learn to read first in the immersion language, later transferring literacy skills to English. Partial immersion students learn to read first in English, later transferring literacy skills to the immersion language. Because of this difference, much of what is discussed in Activities 2 and 3 refers mainly to total immersion students. However, since good immersion teaching is applicable to both program models, if you are a partial immersion teacher you probably will want to review these activities for general information about total immersion as well as information about techniques such as curriculum integration, the Language Experience Approach, content-obligatory, and content-compatible language objectives.

Activity 2

Transition to Reading - The Language Experience Approach

Students begin speaking spontaneously in the immersion language as their receptive language base broadens. Some students begin speaking with one or two word utterances early in their immersion experience. Others wait longer, and when they are comfortable, begin speaking in short phrases and sentences. Similar individual differences exist in first language acquistion as well. While immersion teachers should monitor students second language development carefully, these differences should not be cause undue concern.

Most total immersion students have developed sufficient knowledge of the immersion language so that they are ready to begin to read and write about midway through Grade 1. Signs that indicate that students are ready to make this transition are students' spontaneous and increasingly frequent:

a. Demonstration of comprehension of the spoken language
b. Attempts to read all or portions of familiar and new printed materials
c. Attempts to express ideas and thoughts in written form using words and shorts phrases rather than pictures. These attempts at written expression may be comprised of words, phrases, or sentences copied from materials posted in the classroom or those created by students using invented spelling (students use of letters on paper to stand for words, usually not following the conventions of spelling, but students phonetic interpretation of how the word should be spelled).

Activity 2 - continued

Transition to Reading - The Language Experience Approach

Once students show signs of beginning the transition to readers and writers, what are some effective ways to help them progress? Continued use of the three techniques described in Activity 1 will increase students receptive and expressive language base.

Veteran immersion teachers report that another very effective method of assisting students in making the transition from listener and speaker to beginning reader is the Language Experience Approach (LEA). This approach reflects the interrelatedness of listening, speaking, reading, and writing as students learn the immersion language.

There are two phases in the Language Experience Approach. The first phase involves the activities leading up to and the creation of a text; the second phase involves reading and language arts activities organized around the student-dictated text.

During the first phase, the class has a common experience, such as a field trip, a guest speaker, or an in-class event. Following this experience, the class discusses important points and the teacher helps students organize their observations and thoughts by using real objects, pictures, and webs. Finally, students dictate what they want to say about the experience and the teacher records what students say on chart paper. The experience, organization of students' observations and dictation of what they want to say, may take place on the same day or over a period of several days.

Activity 2 - continued

Transition to Reading - The Language Experience Approach

During the second phase, the student-dictated text is used as reading material. Students may read the text along with the teacher, create illustrations, sequence events and identify descriptive language, and groups of words containing the same sounds.

When students read the language that they have dictated they tend to be more successful in understanding this language. This is why the Language Experience Approach is an effective tool in helping students make the transition to beginning readers. Using student-dictated texts for reading, when the subject of the text is one students have experienced, is an effective approach because students learn language in a meaningful context. This experience, plus previous learning forms students' background knowledge--a critical factor in reading comprehension.

Let's examine a lesson to see how and why the Language Experience Approach is used successfully in the immersion classroom. Just as with any lesson, the immersion teacher plans the experience with content objectives and language objectives in mind. An experience may be as simple as students sorting a basket of items to classify people's "needs" (food, clothing, and shelter) and "wants" (toys, pets, and trips). Or it may be as complicated as a class visit to an aquarium so that students may observe and learn to distinguish the characteristics of living and nonliving objects; or learn to identify examples of living and nonliving components in a balanced aquarium. The purpose of the experience, whether it is simple or complex, is to provide students with background knowledge and

Transition to Reading - The Language Experience Approach

language set in a meaningful context. Even if students know a great deal about living and nonliving things and aquariums, a class experience gives them a real context for new language learning that can be used as a common point of reference for class discussions.

Following an experience, the teacher assists students in organizing and recording the key points. On the day following a trip to the aquarium, the teacher uses illustrations of living and nonliving things to review the trip. Students classify the illustrations into the categories living and nonliving things; then they dictate items in each category to the teacher who records the items in print. On another day, the teacher helps students review their lists and uses the lists to brainstorm ideas for a story about one of the living creatures seen at the aquarium. The teacher uses a web to organize students' ideas for characters, settings, problems, and solutions. Because the teacher posts illustrations next to each item on the lists, students have visual clues to help them remember distinguishing characteristics. Students also can point to pictures when they need the teacher's help in expressing an idea while brainstorming. Once the teacher notes student-dictated ideas for each point in the story structure, the class decides which suggestions fit best together to form the frame of a simple story. From their story structure web, students dictate a short story about an angel fish.

Activity 2 - continued

Transition to Reading - The Language Experience Approach

During the next phase of the Language Experience Approach, the teacher helps students read a number of times the story they have written; each time, their attention is focused on different objectives. Students listen to, and follow on individual copies of the text as the story is played on a tape recorder at a listening center; and then, in small groups, they name and discuss various elements of the story structure--the characters, setting, problems, and solutions of the story. Each student makes his/her own book, copying and illustrating the text. Using sentence strips, students work cooperatively to sequence the events of the story. They make lists of words from the story that contain the sound /p/ and /a/. Students make illustrated word cards to file in their personal dictionaries. Small groups of students select one part of the story and make a large picture to depict it, and student illustrations are sequenced correctly and displayed on classroom walls along with the text. Finally, the class makes a shopping list of items needed to construct a balanced aquarium; they research the prices of these items, calculate the total cost, and dictate a letter to their teacher requesting funds for the aquarium from the principal.

During each step of the Language Experience Approach lessons, students are listening, speaking, reading, and writing about a topic for which they all have a common reference point--the aquarium visit. Students' language is recorded in print and then used as the reading text. Reading and language arts activities are planned and organized around a

Activity 2 - continued

Transition to Reading - The Language Experience Approach

student-generated text--a text that was drawn from their experiences and their language. The same process may be followed to develop simpler or more complicated texts for students with varying levels of language proficiency.

I. Using the Language Experience Planning Sheet, on the next page, plan a series of lessons for the following experience. You may want to confer with an immersion or a nonimmersion colleague to see how they would plan the lesson. If you consult with a nonimmersion teacher, what modifications, if any, would you make to teach this lesson in an immersion class?

A Grade 1 teacher planned a class visit to a neighborhood grocery store with two social studies objectives in mind: 1) *Students will explore the organization of the store;* 2) *students will gain information about the jobs of different employees in the store.* The class was guided on a tour of the store by an employee who highlighted the organization and facilities needed for storing and displaying various kinds of foods. The store manager, a cashier, a stock person and managers from the produce, dairy, and meat departments described their jobs for the students. During the visit, the teacher described in the immersion language what was being explained in English. Snapshots were taken of the store's key personnel and important characteristics. These were used as points of reference once the class was back at school.

Language Experience Planning Sheet

Objective:

Experience:

Activities to Review the Experience and Organize Students' Ideas
(Lists, webs, charts, graphs, photos, real objects, etc.)

Student-dictated text
(Story, description, thank you letter, letter of further inquiry, etc.)

Activities organized around the student-dictated text

Activity 2 - continued

Transition to Reading - The Language Experience Approach

II. Select a science, social studies, or math objective from Appendix A, or one from your local school district's curriculum. Using the Language Experience Planning Sheet on the following page, plan a series of lessons. You may want to confer with an immersion or a nonimmersion colleague to see how they would plan a similar lesson. If you consult with a nonimmersion teacher, what modifications, if any, would you make to teach this lesson in an immersion class?

Language Experience Planning Sheet

Objective:

Experience:

Activities to Review the Experience and Organize Students' Ideas
(Lists, webs, charts, graphs, photos, real objects, etc.)

Student-dictated text
(Story, description, thank you letter, letter of further inquiry, etc.)

Activities organized around the student-dictated text

Activity 3

Transition to Reading - The Classroom Environment

The immersion classroom environment is to immersion language development what the home environment is to first language development. Because the majority of students in an immersion classroom live in an English environment once they leave the classroom, it is critical that the teacher take every opportunity to surround students with varied stimuli in the immersion language. This means that a rich variety of print and nonprint materials, such as, lists, charts, signs, displays, illustrations, students' work, and learning centers should be evident in an immersion classroom. These materials should be attractively displayed, accessible to students, and serve as information sources. Specific topics currently being studied should be evident to visitors whether or not they speak or read the immersion language. The environment should be designed to support and reflect learning in all areas of the curriculum and promote students progress by integrating reading and language arts across the curriculum.

I. Go into a classroom--immersion or nonimmersion--to observe and note the physical environment. What do your observations lead you to believe is being taught in this classroom? What evidence is there that this is a classroom where reading and language arts are valued and encouraged? The list of questions on the following page may assist you in your observations.

Activity 3 - continued

Transition to Reading - The Classroom Environment

How is the furniture arranged?
Are there designated areas for special activities? What are they?
Are there opportunities for students to expand their experiences and practice content learning and language?
How are the bulletin boards used?
How is the wall space used?
How are print instructional materials housed/displayed in the room?
What elements do you see that invite students to be readers and writers?
Do you see student work on display?
What indications do you see that reading for meaning is encouraged?

II. Use the grid on the following page to organize your observations. Evaluate what you observe in the physical environment by asking yourself the question: What items in this physical environment would facilitate becoming and continuing to grow as a good reader, writer and language user? The following criteria are suggested as tools to help you rate your observations:

√ would neither help nor hinder students

+ might help student be good readers, writers and language users

- might hinder students becoming good readers, writers and language users

EVALUATION OF INSTRUCTIONAL MATERIALS

Criteria	Ratings				

PART III

FORMALIZED INSTRUCTION IN READING

Activity 4

Formalized Instruction in Reading - Two Language Arts Curricula

Building independent readers is the long-range goal you should keep in mind as you help beginning readers move to a program of formalized instruction in reading. Formalized instruction in reading is an organized, systematic approach to teaching students knowledge and skills for understanding written text. The importance of using materials and activities that are meaningful and motivating to students, as well as the importance of teaching reading in all areas of the curriculum, should not be forgotten.

You have already begun to teach many reading concepts and skills as you help students get ready to read and make the transition to beginning readers. What are the knowledge and skills that immersion students need to become independent readers? What are some effective ways of teaching students how to use these tools? What activities can be planned to give students adequate and meaningful practice with these knowledge and skills in the immersion language? These are question to think about as you plan for formalized instruction in reading.

Your local school district's reading language arts scope and sequence outlines knowledge and skills all students need to develop to become independent readers in order to read. All students need to know how to:

approach reading as an interactive process
use their background knowledge to understand a text
use clues in a text, such as illustrations, to understand what they are reading
establish a purpose for reading
read narrative, expository, persuasive and procedural texts (see Appendix B)

Activity 4 - continued

Formalized Instruction in Reading - Two Language Arts Curricula

What do you do about teaching aspects of the immersion language that are not included in this scope and sequence? How do you decide when to teach language-specific knowledge and skills that are not covered by your schools district's general reading and language arts scope and sequence?

Some school districts with immersion programs have developed an immersion language scope and sequence that outlines what language should be taught, and when. This document provides teachers with an organized approach to teaching immersion reading and language arts. However, if an immersion language scope and sequence does not exist for your school district, you probably will want to consider suggesting to your colleagues and administrators that one be developed.

The next question is **how** to teach students these knowledge and skills effectively? In the past, students learning to read in a second language were taught vocabulary and grammar skills in isolation. That approach ignored the interrelatedness of listening, speaking, reading, and writing skills. Teaching students isolated vocabulary and grammar skills did not provide them with a meaningful context for understanding language, and could hardly be called highly motivating.

Immersion teachers find children's literature, age-appropriate texts, and student-dictated texts effective materials for teaching reading knowledge and skills. Approaching a text by aiming first for students' global understanding and then proceeding to specific and more detailed learning provides students with many opportunities to become familiar and comfortable with both the language and the content of a text.

Reading aloud to students is an effective strategy while you are getting students ready to read. This strategy continues to be extremely important during formalized instruction in reading. Each time you read a text aloud, students should understand the purpose for reading. What information should they listen for? What information should they look for in the illustrations? The stated purpose might be to understand the gist of the story, or identify main characters, setting, problems, and solutions. Identifying objectives such as understanding the gist of the story or the components of the story structure (characters, setting, problems, and solutions) will allow you to read a story aloud a number of times, giving students a different task with each reading. Multiple readings serve two important purposes: 1) they focus students' attention on a variety of objectives; 2) they give students multiple opportunities to become familiar with new language, or familiar language that is new to them in print. Big books are especially effective for reading aloud to students. Most big books are printed so that students may follow the text as the teacher reads the story aloud and the illustrations are large enough to be seen by all the students.

Following multiple shared readings of a text, you will be able to turn students' attention to more specific reading and language skills, such as identifying descriptive language that refers to a main character or words in the story that begin with or contain certain sounds.

Activity 4 - continued

Formalized Instruction in Reading - Two Language Arts Curricula

Students learn to read by reading, and therefore need many opportunities to apply reading knowledge and skills during practice. A variety of activities should be planned to make such practice meaningful and interesting.

Listening centers allow students to hear the text read aloud while they follow along; this practice reinforces the flow of language, intonation, as well as listening and reading comprehension. Structured small group discussion activities motivate students to recall and discuss a story. A discussion group may be structured around simple questions recorded on a cube; taking turns rolling the die, students may ask and answer such questions as "What is the setting?" or "Who is your favorite character?".

A formalized approach to teaching reading in a primary immersion classroom should include a systematic approach to knowledge and skills that students need to become independent readers. Your local school district's reading and language arts scope and sequence will outline knowledge and skills that are not specific to the immersion language. If available, an immersion language scope and sequence will be of great assistance to you. If not available, developing one is of prime importance to a coordinated program for immersion reading and language arts. Age-appropriate, meaningful texts provide the setting in which to teach both global concepts and specific skills that immersion students need to learn to read.

Activity 4 - continued

Formalized Instruction in Reading - Two Language Arts Curricula

I. During formalized instruction in reading, many nonimmersion teachers use a whole language approach, a basal reading series or a combination of both methods. As an immersion teacher, what is different about how you will develop your formalized instruction in reading program? Do you have access to a basal reading series that includes appropriate language and level of interest for Grade 1 and 2 students? Are there stories in the immersion language that lend themselves to a whole language approach? What options do you have if you discover a highly engaging, age-appropriate story, with attractive illustrations that support the text, but that exists only in English? Once you've thought about these issues, discuss them with a colleague, if possible.

II. Let's apply some of the techniques we've been discussing to a familiar story. Obtain a copy of Goldilocks and the Three Bears either in English or in the immersion language. If the text is available only in English, it is strongly suggested that you translate it to your immersion language. On the following page, make a list of key language that will be critical to students' understanding of the story. What language do you think students may already know? Plan two prereading activities for Goldilocks and the Three Bears. Think about activities that include hands-on experiences and song, poems and chants.

Activity 4 - continued

Formalized Instruction in Reading - Two Language Arts Curricula

Goldilocks and the Three Bears

Key language	Language students may already know

Prereading activities

1.

2.

Activity 4 - continued

Formalized Instruction in Reading - Two Language Arts Curricula

III. Once students have had the benefit of a prereading experience, you are ready to read the story. A critical factor in successful lessons is anticipating possible difficulties in students understanding and planning for ways to provide students with more than one way to understand. For example, if you've identified "porridge" as critical to the understanding of Goldilocks and the Three Bears you may plan to: refer to the picture in the illustrations, show students a box of porridge, and allow each student to taste porridge. Review your list of language identified as key to the understanding of Goldilocks and the Three Bears. In the space below, plan three ways to help students understand this key language as you are reading the story aloud for the first time.

Goldilocks and the Three Bears

Key language	Student understanding

Activity 4 - continued

Formalized Instruction in Reading - Two Language Arts Curricula

IV. On the following pages is a description of six multiple readings of The Little Red Hen one experienced immersion teacher planned for her class. This description is not intended to be a comprehensive outline of all possibilities but to serve as a small sample of multiple readings that might be planned. Using Goldilocks and the Three Bears, plan a series of multiple readings that target a variety of objectives. A worksheet for your use is provided after the sample multiple readings of The Little Red Hen.

Planning for Multiple Readings

Name of Text: The Little Red Hen

Multiple readings :

1. **Purpose for reading (objective)** - Students will understand the story The Little Red Hen.
   Activity - The teacher reads the story of The Little Red Hen aloud to the class. During a discussion students use illustrations, limited language, and mime, to describe the Little Red Hen as hard-working. The teacher asks each student to draw a picture of an example from the story that shows that the Little Red Hen is hard-working.
2. **Purpose for reading (objective)** - Students will identify the elements of the story structure (characters, settings, problems and solutions).
   Activity - Before reading the story aloud to students, the teacher reviews a completed story-structure web from another story. She shows students a blank web and tells them that their job is to listen and look for information from The Little Red Hen to identify elements of the story structure as she reads the story. After The Little Red Hen has been read to students, the class is divided into cooperative groups. Each group is given a blank story structure web to fill out, using pictures and/or language. On the following day, each group presents it story structure web to the class.
3. **Purpose for reading (objective)** - Students will identify language used in the story to describe the character traits of the Little Red Hen. Students will use illustrations to identify character traits of the Little Red Hen.
   Activity - Before reading the story aloud, the teacher leads the class in a short discussion about the character traits of the dog, the cat, and the duck. Students are instructed to listen for language and to look at illustrations that will help them describe the character traits of the Little Red Hen. Students are encouraged to interrupt the reading of the story to identify character traits, which the teacher records on chart paper, using sketches and language. After a class discussion of the character traits of the Little Red Hen, each student receives a blank book, cut out in the form of the Little Red Hen. Referring to the class list, students illustrate and describe in simple language, the Little Red Hen's character traits.

Planning for Multiple Readings

Multiple readings - continued :

4. **Purpose for reading (specific language objective) -** Students will identify all the words in the story which contain the sound /p/.
   Activity - Before reading the story, the teacher records on chart paper, five words and illustrations from the class dictionary which contain the sound /p/. Students are asked to identify what these five words have in common. Students are instructed to listen for words used in the story that contain the sound /p/. They are also told to look at the illustrations for language that also contains this sound. As the teacher is reading, students are encouraged to interrupt and identify language containing the sound /p/ which the teacher adds to the chart paper. Each student selects one of the words containing the sound /p/ to create an entry (word and illustration) for the class dictionary.
5. **Purpose for reading (specific language objective) -** Students will identify action language in The Little Red Hen.
   Activity - Before reading the story, the teacher mimes five examples of action words. As students identify what she is doing, she records each action work on chart paper, accompanied by a simple sketch. Students identify the language recorded on the chart paper as language that describes actions. As she rereads the story, the teacher asks students to listen for other language that describes action. As identified, the teacher records additional action language on the chart paper. Each student selects one of the action words or expressions to create an entry (word and illustration) for the class dictionary.
6. **Purpose for reading (specific language objective) -** Students will listen and understand The Little Red Hen while following along in individual texts. They will listen for language used to form questions.
   Activity - The class recites the chant, "Who stole the candy from the candy box?" (Qui a pris les bonbons de la bonbonnière?). The class discusses other questions that are formed by using "who". The teacher explains that students will go in small groups to a listening center and listen to a recorded version of The Little Red Hen while following along in their own copies of the story. She asks them to pay special attention to questions in the story formed with "who". After listening to the story, the class identifies "who" questions which the teacher records on chart paper. Using these questions, the class creates a new chant modeled on "Who stole the candy from the candy box?"

Planning for Multiple Readings

Name of Text:

Multiple readings :

1. **Purpose for reading (objective) -**
   Activity -

2. **Purpose for reading (objective) -**
   Activity -

3. **Purpose for reading (objective) -**
   Activity -

4. **Purpose for reading (objective) -**
   Activity -

5. **Purpose for reading (objective) -**
   Activity -

6. **Purpose for reading (objective) -**
   Activity -

Activity 5

Formalized Instruction in Reading - Language Objectives

As discussed in Activity 4, immersion teachers have two language arts curricula to teach. The reading and language arts curriculum developed by the local school district outlines objectives that are not specific to the immersion language. For example, the Grade 1 objective *students will develop understanding of setting* may be taught in any language.

In contrast, the immersion language scope and sequence outlines the immersion language students are expected to acquire each year. The combination of each year's objectives, grade by grade, describes the language students learn for the span of the program. Language growth does not "just happen"; teachers must plan for it, using the immersion language scope and sequence that serves as a guide to outline what has been taught in previous years as well as what teachers should introduce or teach at a specific grade level.

As you plan for reading and language arts lessons, specific language objectives should be identified. There are two types of language objectives that you need to plan:

- content-obligatory language
- content-compatible language

Because available reading materials are likely to include language that is new or unfamiliar to students, you will have to decide which language should be highlighted for them. The language you highlight will depend on the importance of that language to student understanding of the text. This is *content-obligatory language* because students understanding of this language is critical to understanding of the material and the targeted objectives. If a text has so much new or unfamiliar language that students cannot read or listen to it without stopping in the middle of every sentence for an explanation, perhaps you should consider using the text later in the year, or not at all.

Let's examine a Grade 2 lesson during which students are reading the short narrative Swimmy by Leo Lionni. One reading and language arts objective is: *Students will develop an understanding of conflict and resolution.* Students must state one of Swimmy's problems, and indicate the action the character takes to resolve the problem. When planning, the immersion teacher must ask, "What language must students be able to understand or use in order to read and understand the text?" Additional considerations are that students should be able to:

- state the problem
  (A big fish ate all Swimmy's brothers and sisters. Swimmy is afraid. Swimmy is alone. Swimmy is sad. The little fish swim together. A big fish chases the little fish.)

- indicate the action the character takes to resolve the problem
  (Swimmy hid. Swimmy organized the other fish. All the fish swam together. All the fish scared the big fish away.)

This is the content-obligatory language for this lesson.

Content-compatible language is based on three factors: the immersion language scope and sequence; the teacher's analysis of where students' language needs review and refinement; and the activities planned around the text. Content-compatible language is language that is not essential to mastery of the objective, but rather is determined by activities planned to go with the lesson. Students need content-compatible language to understand and perform the activities.

Considering the immersion language scope and sequence and assessment of students' needs, this Grade 2 teacher has developed an activity organized around the other sea creatures Swimmy meets in the ocean. After a visit to an aquarium, she uses illustrations to talk about selected sea creatures, drawing students attention to unique physical features and descriptive language used in the text. She asks pairs of students to draw an aquarium with at least five sea creatures, including a minimum of three among those the class discussed. Then students are to write a short paragraph describing their aquarium. The content-compatible language from this lesson might include: jelly fish, as beautiful as rainbow jelly; a lobster with armor like an underwater tank; strange fish as still as statues, comparisons (as __adjective__ as), plurals of nouns, or gender agreement.

I. Identify a text, other than Goldilocks and the Three Bears, that would be appropriate to the age and grade level of students you are or will be teaching. An objective dealing with characters, setting, problems, and solutions might be targeted. Once you have identified the objectives you will be teaching through the text you select, note them on the planning sheet for language objectives found on the following page. Note also the content-obligatory and content-compatible language objectives that would be taught at the same time.

Planning Sheet for Language Objectives

Text:

Content objectives:

Content-obligatory language objectives

Content-compatible language objectives

Activity 6

Formalized Instruction in Reading - Interdisciplinary Language Objectives

Identification of language objectives that cross curricular disciplines will provide students with multiple opportunities to hear, speak about, and begin to read and write using the same language in various contexts. This takes conscious planning on your part as you select content objectives that will complement growth of students' language and literacy skills when taught simultaneously.

Let's look at how one experienced Grade 1 teacher grouped objectives from social studies, math, and science around a reading and language arts objective. As this teacher planned a unit to explore story structure (characters, setting, problem, and solution) using The Three Little Pigs she examined the three other areas of the curriculum (social studies, math, and science) to identify objectives that would promote development of students literacy skills through the use of language common to several disciplines. In social studies, the teacher identified the unit on shelters as one where language and concepts could be the same as those found in The Three Little Pigs. As a result of multiple readings of the story, students became familiar with the language used in the story. Then the teacher presented the class with a large collection of possible building materials, some appropriate, some inappropriate, to construct shelters. From this collection, students identified materials that could be used to build shelters. Among the first materials selected were straw, twigs, and bricks, from the story of The Three Little Pigs. As students identified appropriate building materials in the collection, the teacher named and described the materials in a very natural manner. The collection of appropriate building materials grew to include straw, bricks, wood, aluminum and vinyl siding; written labels were attached to each one. Students were asked to "design" a shelter (houses, apartments, libraries, fire stations, schools, office buildings, train stations, etc.) and build a small model out of clay, attaching material from the collection to the outside of the clay structure. All shelters were gathered together to construct a class village with labels indicating the function of each structure.

During math, students were given labeled cardboard representations of different types of shelters to measure using nonstandard units (white cuisinaire rods and plastic chains). First the class constructed a pictograph comparing the heights of the measured shelters. Then students worked on simple problem-solving situations comparing the heights of the various shelters and referring to the graph they had made earlier (larger than..., smaller than..., the same as).

In science, the class was investigating objects that either sink or float. The teacher selected pieces of various building materials--wood, aluminum and vinyl siding, and brick--to use for small group explorations.

This teacher was able to capitalize on all areas of the curriculum by planning and teaching objectives that could share language objectives and related concepts. The integration of the four content areas permitted the shared language components to be highlighted. Students exposure to, and

Formalized Instruction in Reading - Interdisciplinary Language Objectives

practice of this language was increased and intensified. [Language common to all of these lessons was: shelters (names of specific shelters), building materials, and the language of comparison.]

I. On the following page is an example of math, science, and social studies objectives that could be taught at the same time as The Little Red Hen to integrate content and language objectives. Once you have reviewed this example, refer back to your list of familiar and/or predictable literature on page 10. Select one of the titles and use the worksheet "Integrating Content and Language Objectives" to plan to teach math, science and social studies objectives that share common language objectives. Identify math, science and social studies objectives could be taught at the same time as the story you select.

INTEGRATING CONTENT AND LANGUAGE OBJECTIVES

Title of familiar or predictable literature: The Little Red Hen

Math objectives	**Language**
Students will:	
• Measure capacity of a container (Students measures ingredients for baking bread.)	Names of ingredients Numbers Sequencing (first, second, etc.)
• Measure and record lengths using standard units (Students measure growth of plants that yield grains used for bread--corn and wheat.)	Names of plants Numbers Comparisons (tall, taller, tallest; short, shorter, shortest, etc.) Names of grains Planting/caring for plants
• Demonstrate addition or subtraction situations using objects (Students solve story problems based on the situations from The Little Red Hen.)	Names of grains (used as concrete objects during problem solving)
Science objectives	
Students will:	
• Distinguish between objects that are seeds and those which are not (Students plant seeds and other objects to see which ones grow)	Names of plants Planting/caring for plants Names of grains
• Demonstrates that the height of growing plants indicates that they grow in an orderly manner (Students plant corn or wheat; they care for and observe the plants.)	Names of plants Numbers Names of grains Planting/caring for plants
• Describe food that comes from plants (Students grind wheat and use flour to bake bread.)	Names of plants Foods Procedure for grinding wheat Procedure for baking bread

INTEGRATING CONTENT AND LANGUAGE OBJECTIVES

Title of familiar or predictable literature: The Little Red Hen

Social studies objectives	**Language**
Students will:	
• Trace the production of food (Students visit a bakery to learn about how bread is baked in large quantities.)	Names of ingredients Procedure for baking bread
• Indicate how people obtain the food they need (Students discuss buying products in a grocery story with making them at home.)	Names of stores Names of ingredients
• Indicate how people of other culture may have different methods and traditions for selecting and preparing foods (Students learn about and taste breads from different cultures.)	Names of breads from other cultures Description of breads from other cultures Names of ingredients in different breads

INTEGRATING CONTENT AND LANGUAGE OBJECTIVES

Title of familiar or predictable literature: The Little Red Hen

Math objectives **Language**

Science objectives **Language**

Social studies objectives **Language**

PART IV

THE WRITING PROCESS

PLEASE NOTE

The following section of this manual presents an overview of the writing process--a complex approach to teaching students to write. Neither the video program nor the activities presented in this manual are intended to cover this topic comprehensively. The intent of the video program and the manual is to suggest to immersion teachers strategies for implementation of the writing process in the immersion classroom.

If you are unfamiliar with the writing process, it is **strongly** recommended that you consult the following resources and observe experienced immersion and nonimmersion teachers as they teach their students to write using this approach.

List of resources:

Coming to Know: Writing to Learn in the Intermediate Grades, Nancie Atwell, ed. Portsmouth, NH: Heinemann Educational Books, 1990.

Writing: Teachers & Children at Work, by Donald H. Graves. Portsmouth, NH: Heinemann Educational Books, 1983.

Whole Language: Theory in Use, Judith M. Newman, ed. Portsmouth, NH: Heinemann Educational Books, 1985.

Activity 7

The Writing Process - From Beginning to Independent Writing

Writing is an important component of the reading and language arts curriculum. The ultimate goal of teaching students to write is to develop independent writers. However, in order to make language meaningful to students it is essential to teach listening, speaking, reading, and writing simultaneously in a rich and stimulating environment where the meaning of language is evident. Opportunities to use language in its various forms should be inviting and motivating to students.

In the very early stages of learning to write, students should be given many opportunities to express their ideas on paper. For kindergarten students, this means that teachers should model both drawing and writing as a means of written expression. Surrounding students with charts, lists, and other printed materials created with students will assist them in making the connection between written and spoken language. Daily shared reading of familiar and repetitive literature is another important tool in helping students to make this link.

In the primary grades beginning immersion students rely heavily on self-expression through drawing. They learn that drawing and writing are valued ways of expressing their thoughts and ideas on paper. As receptive and expressive language base expands, students progress through gradually more sophisticated approaches to written self-expression using drawings, single words, and short phrases. Students also dictate what they want to say for the teacher to record. As in any process, these stages are not lock step, and most often students use these many approaches to written self-expression simultaneously.

Activity 7 - continued

The Writing Process - From Beginning to Independent Writing

The Language Experience Approach plays an important role in helping students to make the transition from novice, teacher-dependent writers to more experienced independent writers in their new language. The pages that follow will describe how the Language Experience Approach meshes with the writing process.

The writing process is a series of steps in which students' writing progresses from the first draft to final form. Primary grade students follow the same steps, as do upper elementary students; however, a more teacher-centered approach is used in the primary grades in order to make allowances for the students limited level of language proficiency and limited experience with the writing process. The steps in the writing process include:

- Sharing a prewriting experience
- Writing the first draft
- Revising
- Editing
- Publishing

During the **prewriting experience**, teachers plan a curriculum-related shared experience for the class. Similar to the whole class experiences described in the section on the Language Experience Approach, the purpose of this experience is to provide students with a meaningful context to help students learn new language and concepts as well as provide them with a shared point of reference.

Activity 7 - continued

The Writing Process - From Beginning to Independent Writing

Following the class experience, the teacher helps students organize the main points in preparation for writing. Using real objects and representations of real objects (such as pictures) the teacher involves students in recalling their common experience and organizing it in such a way that they can write about it. Teachers may ask students to classify objects in large circles on the floor, or tape pictures to parts of a web drawn on the chalkboard. During this organizational phase, it is important to encourage and help students discuss and include their previous knowledge in the web or Venn diagram.

Once students have organized their information and identified an appropriate audience, they are ready to **write the first draft**. During this phase, students' writing may be as simple as a picture or a few sentences describing an important event or observations from a field trip; or it may be as complicated as an invented story with multiple characters reflecting the theme of a field trip. During Kindergarten and early Grade 1, "writing" usually means that students draw pictures, or dictate what they want to say to the teacher, who records students' language in print. Because beginning immersion students have limited means of expression, they will use objects, gestures, single words, and short phrases to communicate what they want the teacher to record. They may even tell the teacher what they want to say in English.

Activity 7 - continued

The Writing Process - From Beginning to Independent Writing

The teacher's job during these early shared writing experiences frequently involves making a "rich interpretation" of what students say before recording it. Making a rich interpretation is an important part of the negotiation of meaning process--the give and take between two people who are trying to communicate. Rich interpretations are especially important in conversations where one person (the teacher) has a higher level of language proficiency than the other (the student). When a student expresses an incomplete or unclear idea to be recorded, the teacher:

- listens and observes to use all available clues to understand what the student is trying to communicate
- restates or reframes the student's utterance in a complete and correct sentence
- checks with the student to be sure that the meaning of the restatement is accurate

Once these three steps are completed, the teacher then records the agreed upon phrase on chart paper.

Let's examine a simple example of a rich interpretation. During a class dictated description of a field trip to the zoo, a kindergarten student said, "Giraffe, long.", while using gestures and pointing to his neck. The teacher replied, "Oh yes, the giraffe has a very long neck, doesn't she? So shall we write, 'The giraffe has a very long neck.'?" If the meaning of the student's statement had not been quite so obvious, then a quick sketch by the teacher or the use of available objects or pictures in the class might have been necessary to make sure that what the teacher restated was accurate.

Activity 7 - continued

The Writing Process - From Beginning to Independent Writing

Once the first draft has been written or dictated, students' attention is turned to the **revising** phase of the writing process. During the revising phase, students learn that once a piece is written, it can be improved by making changes with suggestions from teachers and peers. Teachers and peers who serve as members of a response group, volunteer praise, pose questions, and offer suggestions for polishing a piece. Student-authors consider offered suggestions from their response group and decided what changes to make in their first draft. They learn to cross out words and replace them with other words; they learn to accept suggestions about changing the order of sentences to sequence ideas.

During the **editing** phase, students learn to focus attention on examining the accuracy of mechanical and grammatical aspects of their work. They learn to check a revised copy for capital letters, correct punctuation, spelling, and correct language usage.

Using writing as a meaningful tool to communicate in their second language, students learn language-specific knowledge and skills.
During the revising and editing phase, the teacher focuses students attention on a limited number of organizational and mechanical points in a piece. For example, in a Spanish immersion Grade 1 student-dictated description of a trip to the zoo, the teacher left out question marks at the beginning of questions. She used the editing phase of the writing process to teach a "mini" lesson on correct use of punctuation at the beginning and the end of questions in Spanish.

Activity 7 - continued

The Writing Process - From Beginning to Independent Writing

Finally, students **publish** their work and/or share it with an audience. This step values the ideas, time, and effort students have devoted to creating a written piece. There are many ways to publish or share a piece--copying and illustrating a text to read aloud to other classes, displaying a text in the hall or in the school media center, or reading a text aloud at a school assembly.

Very early in their careers as writers, immersion students learn many skills and concepts that are common to good writers in any language, as well as knowledge and skills that are specific to the immersion language.

On the following pages is an example of how one experienced immersion teacher guided students through the writing process while focusing the class' attention on a social studies objective. You may find it helpful to review this example before you begin the activities in this section of the manual.

The Writing Process - From Beginning to Independent Writing

EXAMPLE:

Grade 1 social studies objectives:

- *Differentiate between foods that come from plants and those which come from animals*
- *Identify the sources of selected foods*
- *Recognize that most foods are produced on farms*

Prewriting Experiences

The teacher presented students with a collection of food items that they classified into two categories--foods that come from plants and those that come from animals. The teacher presented a series of film strips about specialized farms that she narrated in the immersion language. During a visit to a farm, groups of students looked for examples of plants and animals that serve as sources of food.

The class constructed a floor map of the farm using small scale models of farm buildings, animals, plants, and workers observed at the farm. The components of the farm were labeled. Using the two collections of plants and animals that the teacher used to introduce the concept of food from plants and food from animals, as well as their observations at the farm, students dictated a list of plants and animals followed by the foods produced from each one. The teacher added simple illustrations to the list to provide students with clues to the meaning of the words. The list was displayed in the classroom.

Writing the First Draft

The teacher helped students identify a nearby kindergarten class as the audience for a class-dictated description of plants and animals that serve as food sources. Using the previously dictated lists of plants and animals that serve as food sources, the students dictated simple sentences such as, "Carrots come from plants. Lettuce comes from plants. Hamburger comes from animals." The first draft consisted of two paragraphs describing foods that come from plants and those that come from animals.

Activity 7 - continued

The Writing Process - From Beginning to Independent Writing

EXAMPLE:

Revising

After the class reread their first draft, the teacher asked them for missing information. She asked them where they got their information about food sources, and students replied, "from the farm". Guided by teacher questions, students suggested that they needed to add references to their visit to the farm as well as a topic sentence to introduce each paragraph.

Editing

As the class reread the revised piece, the teacher focused students' attention on punctuation. Punctuation at the end of several sentences had been omitted intentionally by the teacher. Students identified the errors and the teacher helped the students correct them while giving a mini-lesson on punctuation.

Publishing

The class had several choices present as to how to present this piece to the audience in the kindergarten class. The choices included: recopying the piece on chart paper and reading the text aloud; recopying the piece on chart paper, cutting the text apart to make a big book with illustrations. The class opted to construct a big book that it read to the kindergarten class.

Activity 7 - continued

The Writing Process - From Beginning to Independent Writing

I. Listed below are two Grade 1 social studies performance objectives from the unit Our Community. Select one of the objectives and note your ideas of different writing topics and intents* that focus on the objectives you select. Use the planning sheet on the following page to plan your lessons. Begin with a prewriting experience and describe how you would guide students through each phase of the writing process. Think about pre-writing experiences, such as field trips or in-class experiences that might enhance students concept and language development. The objectives are:

1. *List services provided for the local community*
2. *Given information on the local community, students will list the various jobs necessary for a community to exist*

You may prefer to select other social studies objectives from your grade-level curriculum.

II. Identify a writing intent* and the grade level you will most likely be teaching. Select an objective from an area of the curriculum and use the writing process planning sheet to give a detailed description of how you would guide students through each of the steps in the writing process.

*(Narrative, persuasive, expository or procedural - For definitions, see Appendix C)

WRITING PROCESS PLANNING SHEET

Sharing a prewriting experience

Writing the first draft

Revising

Editing

Publishing

BACKGROUND READING

Becoming a Nation of Readers:

The Report of the Commission on Reading

The National Academy of Education

The National Institute of Education

The Center for the Study of Reading

Excerpted from the publication A Nation of Readers: The Report of the Commission on Reading, by The National Academy of Education, The National Institute of Education, and The Center for the Study of Reading. This material is in the public domain.

What Is Reading?

Substantial advances in understanding the process of reading have been made in the last decade. The majority of scholars in the field now agree on the nature of reading: Reading is the process of constructing meaning from written texts. It is a complex skill requiring the coordination of a number of interrelated sources of information.

Reading can be compared to the performance of a symphony orchestra. This analogy illustrates three points. First, like the performance of a symphony, reading is a holistic act. In other words, while reading can be analyzed into subskills such as discriminating letters and identifying words, performing the subskills one at a time does not constitute reading. Reading can be said to take place only when the parts are put together in a smooth, integrated performance. Second, success in reading comes from practice over long periods of time, like skill in playing musical instruments. Indeed, it is a lifelong endeavor. Third, as with a musical score, there may be more than one interpretation of a text. The interpretation depends upon the background of the reader, the purpose for reading, and the context in which reading occurs.

How does the process of reading occur? A common view that reading is a process in which the pronunciation of words gives access to their meanings; the meanings of the words add together to form the meanings of clauses and sentences; and the meanings of sentences combine to produce the meanings of paragraphs. In this conception, readers are viewed as always 'starting at the bottom' - identifying letters - and then working up through words and sentences to higher levels until they finally understand the meaning of the text.

However, research establishes that the foregoing view of reading is only partly correct. In addition to obtaining information from the letters and words in a text, reading involves selecting and using knowledge about people, places, and things, and knowledge about texts and their organization. A text is not so much a vessel containing meaning as it is a source of partial information that enables the reader to use already-possessed knowledge to determine the intended meaning.

Reading is a process in which information from the text and the knowledge possessed by the reader act together to produce meaning. Some aspects of this interaction can be illustrated with the following passage:

> When Mary arrived at the restaurant, the woman at the door greeted her and checked for her name. A few minutes later, Mary was escorted to her chair and was shown the day's menu. The attendant was helpful but brusque, almost to the point of being rude. Later, she paid the woman at the door and left.[1]

The first phrase will lead readers to expect that their existing knowledge of restaurants will be relevant. That is to say, the word "restaurant" brings to mind past associations and experiences with restaurants and the interrelations among these ideas. From there, reading is easy because of the expectations that come from this knowledge. The woman at the door is taken to be the hostess. Mary must sit at a chair at a dining table before she can eat. The "attendant" is probably the waiter or waitress, and the person referred to as leaving in the last sentence is probably Mary. These are all inferences that make use of both the information presented in the text and the knowledge the reader already has about restaurants.

Good readers skillfully integrate information in the text with what they already know. However, immature readers may depend too much on either letter by letter and word by word analysis or too much on the knowledge they already have about the topic.[2]

Some children laboriously work their way through texts word by word, or even letter by letter (e.g. m.m-M-a-r-y). They are so intent on saying the words right that they miss aspects of the meaning. In oral reading, these children tend to make nonsensical errors that look or sound like the words they are trying to read with results such as, ' 'The woman at the door *grated* her and *locked* for her name."[3] These children sometimes fail to use the knowledge they may have about the topic think about what they are trying to read.

Other immature readers show an overreliance on the knowledge they already have about the topic. Such children may use pictures, titles, their imagination, and only a small amount of information in the text to produce a believable story.[4] For example, "... and then Mary got to the... ah... pizza place. She went in the door and greeted her friend. Then she sat down in her chair and had a pizza." These children often do not have enough skill at word identification to make use of all of the information in the written message.

Five generalizations flow from the research of the past decade on the nature of reading:

The first generalization is that *reading is a constructive process.* No text is completely self-explanatory. In interpreting a text, readers draw on their store of knowledge about the topic of the text. Readers use this prior knowledge to fill in gaps in the message and to integrate the different pieces of information in the message. That is to say, readers "construct" the meaning. In the restaurant example, the reader is able to infer that Mary sat at a table, selected her meal from the menu, and was probably served by the attendant. Yet none of this information is expressly mentioned in the text. These details are constructed from the reader's other knowledge of restaurants.

The meaning constructed from the same text can vary greatly among people because of differences in the knowledge they posess.[5] Sometimes people do not have enough knowledge to understand a text, or they may have knowledge that they do not use fully. Variations in interpretation often arise because people have different conceptions about the topic than the author supposed.

Some children may completely lack knowledge on a particular topic, others may know something, while still others may know a lot. Research shows that such differences in knowledge influence children's understanding. For example, in one study, second-grade children equivalent in overall reading ability were given a test of knowledge about spiders prior to reading a selection about spiders.[6] Then they were asked questions about the selection. Children who were more familiar with spiders were significantly better at answering the questions, particularly questions that required reasoning.

Research reveals that children are not good at drawing on their prior knowledge, especially in school settings.[7] They may know something relevant, but yet not use it when trying to understand a passage. These failures are more likely to happen when understanding the passage requires children to extend their knowledge to a somewhat different situation. Even a subtle difference between a child's interpretation and the "right" adult interpretation can give rise to the impression that the child doesn't understand the material.

The second principle is that *reading must be fluent.* The foundation of fluency is the ability to identify individual words. Since English is an alphabetic language, there is a fairly regular connection between the spelling of a word and its pronunciation. Every would-be reader must "break the code" that relates spelling to sound and meaning. Research suggests that, no matter which strategies are used to introduce them to reading, the children who earn the best scores on reading comprehension tests in the second grade are the ones who made the most progress in fast and accurate word identification in the first grade.[8]

"Decoding" a word - that is, identifying its pronunciation and meaning - involves more than letter by letter analysis. It has been known since late in the 19th century that short, familiar words can be read as fast as single letters and that, under some conditions, words can be identified when the separate letters cannot be.[9] These facts would be impossible if the first step in word identification were always identification of the constituent letters and their sounds. More recently, it has been shown that a meaningful context speeds word identification.[10] For instance, *nurse* is more readily identified if it is preceded by *doctor*. Again, this is a fact that is impossible to square with the common theory that word identification consists of letter by letter decoding.

All of the known facts are understandable within the generally-accepted current model of word identification.[11] According to this model, a possible interpretation of a word usually begins forming in the mind as soon as even partial information has been gleaned about the letters in the word. The possible interpretation reinforces the analysis of the remaining information contained in the letters. When enough evidence from the letters and the context becomes available, the possible interpretation becomes a positive identification. This all happens very quickly, within 250 milliseconds on the average, when the reader is skilled.[12]

Readers must be able to decode words quickly and accurately so that this process can coordinate fluidly with the process of constructing the meaning of the text. One piece of evidence that this is so is that good readers are consistently much faster than poor readers at pronouncing pseudowords that have regular English spellings, such as *tob* and *jate*.[13] People with more than fourth-grade reading ability make almost no mistakes with regular pseudowords. What distinguishes good and poor readers in this case is speed, not accuracy. What this fact means is that typically poor readers have barely mastered spelling-to-sound patterns, whereas good readers have a command that goes beyond simple mastery to automaticity.

Interestingly, it does not appear that skilled readers identify unfamiliar words by rapidly applying "rules" governing the relationships between letters and sounds. Instead, research suggests that they work by analogy with known words.[14] Thus, for example, the pronunciation of *tob* may be worked out from knowledge of the pronunciation of *job* plus a notion of the initial sound of words beginning with *t*. One piece of evidence in support of the decoding-by-analogy strategy is the fact that pseudowords such as *mave*, which have conflicting possible analogies, such as *have* and *wave*, are pronounced more slowly than other pseudowords, and are sometimes pronounced with a short *a* like *have* and are sometimes pronounced with a long *a* like *wave*. Notice that for the process to work the reader need not have any specific knowledge of the difference between long and short *a*'s, only an adequate vocabulary of actual words and a command of the analogy strategy.

Decoding skill must develop to the point where it is automatic and requires little conscious attention. The reader's attention must be available to intepret the text, rather than to figure out the words. Immature readers are sometimes unable to focus on meaning during reading because they have such a low level of decoding skill. They are directing most of their attention to sounding out words letter by letter or syllable by syllable.[15] Even skilled readers show much less understanding of what they read when forced to attend to the surface features of written material.[16]

Consider, for example, the way a young child might read the first sentence of the restaurant passage:

> When Mary arrived at the r, ruh, ruh, ruh-es-tah, oh! restaurant! When Mary arrived at the... rest... restaurant...

Restaurant is a difficult word for this child, and he or she requires several attempts to decode it. By this time, the child's memory for the earlier part of the phrase has faded and he or she has to reread the words to try and create a coherent meaning.

Available figures suggest that an average third grader can read an unfamiliar story aloud at the rate of about 100 words per minute.17 The corresponding rate for poor readers at this level is 50 to 70 words per minute. According to one group of scholars, this rate is "so slow as to interfere with comprehension even of easy material, and is certainly unlikely to leave much ... capacity free for developing new comprehension abilities."[18]

The third principle is that *reading must be strategic*. Skilled readers are flexible. How they read depends upon the complexity of the text, their familiarity with the topic, and their purpose for reading. Studies show that immature readers lack two strategies used by skilled readers:

Assessing their own knowledge relative to the demands of the task, and monitoring their comprehension and implementing fix-up strategies when comprehension fails.[19]

Skilled readers are aware that there are different purposes for reading and that they must change the way they read in response to these purposes. For instance, they know that reading for enjoyment does not require detailed understanding, while reading for a test may. In one study, third and sixth graders were asked to read two stories, one for fun and the other in preparation for a test.[20] The skilled readers adjusted their reading strategies for the two stories; the immature readers didn't. As a result, the immature readers did not remember any more of the story they were supposed to study than the one they were supposed to read for fun.

Perhaps because they frequently do not see the point of reading, poor readers often do not adequately control the way they read. One aspect of such control is being able to monitor ones own reading and notice when failures occur. To investigate this, researchers have placed inconsistent information in passages to see whether readers can detect it. Here are examples of consistent and inconsistent passages:

> All the people who work on this ship get along very well. The people who make a lot of money and the people who don't make much are still friends. The officers treat me as an equal. We often eat our meals together. I guess we are just one big happy family.
>
> All the people who work on this ship get along very well. The people who make a lot of money and the people who don't make much are still friends. The officers treat me like dirt. We often eat our meals together. I guess we are just one big happy family.[21]

Skilled readers readily detect the inconsistency in the second passage. Younger or less able readers are not as likely to notice the problem and usually say that the passage makes sense.[22]

Another aspect of control during reading is being able to take corrective action once a failure in understanding has been detected. Skilled readers know what to do if they have difficulty. There are a number of options available: Keeping the problem "on hold', in the hope that it will be clarified later in the text; rereading parts of the text; looking ahead; or seeking help from outside sources. In one study, researchers asked second and sixth graders questions about their strategies for coping with failures to understand.[23] Older and better readers said that, for instance, if they did not know the meaning of a word they would ask someone else or go to a dictionary. Poorer readers were unable to say what they would do. These reports have been confirmed by actually observing children. In another study, fourth graders were asked to read and remember a story containing some difficult words.[24] They were given paper, a pencil, and a dictionary and told that they could ask questions. As expected, the good readers asked questions, took notes, and used the dictionary. The poor readers used these aids infrequently.

Throughout this report, the idea that skilled reading needs to be strategic will be emphasized. This means that the reader monitors progress in understanding, and resolves problems that prevent understanding.

The fourth principle is that *reading requires motivation*. As every teacher knows, motivation is one of the keys to learning to read. It will take most children several years to learn to read well. Somehow, their attention must be sustained during this period and they must not lose the hope that eventually they will become successful readers.

Reading itself is fun. At least, it is for many children who are skilled readers for their age and for some children with average and below average skill. These children are, as the saying goes, "hooked on books." Increasing the proportion of children who read widely and with evident satisfaction ought to be as much a goal of reading instruction as increasing the number who are competent readers. As will be detailed in the chapter on Extending Literacy, an essential step in reaching that goal is providing children ready access to books that are interesting to them.

Reading instruction can be boring. Aspects of the standard reading lesson are monotonous. Many of the tasks assigned to children in the name of reading are drudgery. Thus, it is not surprising that in one study, for instance, interviews with a sample of poor, black children reading a year above grade level indicated that most liked to read, but few liked the activities called "reading" in school.[25]

Teachers who maintain high levels of motivation conduct fast-paced and varied lessons. Tasks are introduced with enthusiasm and with explanations of why doing them will help one become a better reader. Teachers whose classes are motivated are described as business-like but supportive and friendly. Children taught by teachers rated as having these traits make larger-than-average gains on reading achievement tests.[26]

Failure is not fun. Predictably, poor readers have unfavorable attitudes toward reading. What is not so predictable is whether lack of proficiency in reading stems from unfavorable attitudes or whether it is the other way around. Probably the truth can lie in either direction.

Poor readers frequently are listless and inattentive and sometimes are disruptive. They do not complete work. They give up quickly when faced with a task that is difficult for them. They become anxious when they must read aloud or take a test. A good summary description is that they act as though they were helpless to do better.[27]

The etiology of this sense of helplessness is not completely understood, but it is known that it is affected in sometimes subtle ways by teachers' behavior. It might be thought an act of kindness to express pity when students flub a test, but the hidden message may be that they lack the ability to do any better, that they are not in control of their own fate. An expression of dissatisfaction, on the other hand, may convey the message that the students could do better if they tried harder. People can control effort; people in control, even ones doing poorly, are not helpless.[28]

Effective reading teachers convey by word and deed that everyone can learn to read, if they pay attention and apply themselves. In their classrooms, effort pays off. Research establishes that these teachers assign reading material on which children experience a high rate of success.[29] However, effective teachers do not offer praise indiscriminately. Praise is given in recognition of noteworthy success at a task that is difficult for *this* student. The statement of praise specifies what the student did well, attributes the success to ability and effort, and implies that similar successes are attainable in the future.[30]

Though sustained motivation is essential for learning to read, it should be cautioned that poor motivation is not the only problem, or even the most important problem, faced by poor readers. Experience indicates that even under the best of conditions some percentage of children wiil have difficulties in learning to read. A detailed discussion of what may be the root causes of these difficulties is beyond the scope of this report. It can be asserted with some confidence, nonetheless, that the approaches to reading outlined in this report can help to ameliorate the difficulties faced by very poor readers.

The fifth principle is that *reading is a continously developing skill.* Reading, like playing a musical instrument, is not something that is mastered once and for all at a certain age. Rather, it is a skill that continues to improve through practice. The process begins with a person's earliest exposure to text and a literate culture and continues throughout life.[31]

A good rule of thumb is that the most useful form of practice is doing the whole skill of reading - that is, reading meaningful text for the purpose of understanding the message it contains. This fact poses a problem for the beginner. How can a child practice reading without already being able to read?

One or more of several strategies are used to get a beginner started reading. A natural strategy is to use familiar stories that are readily understandable to the child, or maybe even partly known by heart. A common strategy is to severely restrict the vocabulary of the first selections a beginner will read. Another useful strategy is to teach the beginner something about the relationships between letters and sounds.

Like instruction in other complex skills, reading instruction most often takes the form of explanation, advice, coaching, and practice on what are judged to be the essential aspects or parts of the process. The test of the value of this instruction is whether the child's reading as a whole improves. Thus, in a well-designed reading program, mastering the parts does not become an end in itself, but a means to an end, and there is a proper balance between practice of the parts and practice of the whole. In summary:

- Skilled reading is constructive. Becoming a skilled reader requires learning to reason about written material using knowledge from everyday life and from disciplined fields of study.
- Skilled reading is fluent. Becoming a skilled reader depends upon mastering basic processes to the point where they are automatic, so that attention is freed for the analysis of meaning.
- Skilled reading is strategic. Becoming a skilled reader requires learning to control one's reading in relation to one's purpose, the nature of the material, and whether one is comprehending.
- Skilled reading is motivated. Becoming a skilled reader requires learning to sustain attention and learning that written material can be interesting and informative.
- Skilled reading is a lifelong pursuit. Becoming a skilled reader is a matter of continuous practice, development, and refinement.

Emerging Literacy

This chapter details the critical first steps in learning to read. The first major section describes the role played by experience with reading and language in the home. The second major section deals with reading instruction in the kindergarten. The third major section deals with systematic reading instruction. Systematic reading instruction begins no later than the first grade, and, today, may begin in kindergarten.

Reading and the Home

Reading begins in the home. To a greater or lesser degree, depending upon the home, children acquire knowledge before coming to school that lays the foundation for reading.[1] They acquire concepts for understanding things, events, thoughts and feelings, and the oral language vocabulary for expressing these concepts. They acquire the basic grammar of oral language.

To a greater or lesser degree, children acquire specific knowledge about written language before coming to school. Some children even learn to read at home. Almost all children learn something about the forms of stories, how to ask and answer questions, and how to recognize a few, or sometimes many, letters and words.

Early development of the knowledge required for reading comes from experience talking and learning about the world and talking and learning about written language. Once children are in school, parents' expectations and home language and experience continue to influence how much and how well children read.

Talking and Learning About the World

Reading depends upon wide knowledge.[2] The more knowledge children are able to acquire at home, the greater their chance for success in reading. For example, many textbooks have selections about history and nature. Even understanding simple stories can depend on having common and not so common knowledge. Children who have gone on trips, walked in parks, and gone to zoos and museums will have more background knowledge relevant to school reading than children who have not had these experiences.

Wide experience alone is not enough, however. The way in which parents *talk* to their children about an experience influences what knowledge the children will gain from the experience and their later ability to draw on the knowledge when reading. It is talk about experience that extends the child's stock of concepts and associated vocabulary.[3]

The content of statements and questions and the manner in which they are phrased influence what children will learn from experience. Questions can be phrased in ways that require children merely to put some part of an experience into words or they can be phrased in a thought-provoking manner. For example, one parent may ask a child, "What do you see under the windshield wiper?, while another may ask, "Why do you think there's a slip of paper under the windshield wiper?"

Research suggests that it is important for parents to encourage children to think about events removed from the immediate here and now.[4] In some homes, conversations center around ongoing events. For example, the topic of conversation may be the clothes the child is putting on or the food that is being eaten for dinner. In other homes, parents often ask children to describe events in which the parents did not participate, such as a nursery school outing or a visit to a friend's home. This appears to require children to exercise their memories, to reflect on experience, and to learn to give complete descriptions and tell complete stories.

Children who have extended conversations at home that make them reflect upon experience learn to construct meaning from events. They have a subsequent advantage in learning to read. A long-term study that followed children from age one to seven found that the content and style of the language parents used with their children predicted the children's school achievement in reading.[5]

Talking and Learning About Written Language

While a rich background of experience and the oral language facility to discuss this experience provide an essential foundation, the specific abilities required for reading come from immediate experience with written language. The principle that children learn to read by being taught to read is as true at home as it is in school. The most effective mode for instruction in the home, however, may take a different form than it does at school.

The single most important activity for building the knowledge required for eventual success in reading is reading aloud to children.[6] This is especially so during the preschool years. The benefits are greatest when the child is an active participant, engaging in discussions about stories, learning to identify letters and words, and talking about the meanings of words. One researcher who observed parents reading books to their children discovered differences in the quality and quantity of informal instruction that the parents provided.[7] Some parents asked questions similar to those that teachers ask in school. Thus, their children had experience playing school-like question and answer games. These parents also related the episodes in books to real life events. For example, if parent and child saw a rabbit, the parent might compare the event with one in a book such as *Peter Rabbit*.

Other parents asked children perfunctory questions about stories being read or did not discuss what was being read. Not surprisingly, children whose parents asked few questions or only questions that required repetition of facts from stories achieved less well in school reading than children whose parents asked questions that required thinking and who related story happenings to real life events.[8]

Stories aren't the only material that provide children with exposure to written language. Records or tapes with follow-along books recently have been marketed to help young children learn to read. There is some support for the use of records or tapes in classroom reading activities,[9] and the use of such materials in the home may also be beneficial.

Such old-fashioned materials as chalkboards and paper and pencils can make a difference in children's learning to read. When children who learned to read before going to school were compared to similar children who couldn't read, the early readers were found to have greater access to chalkboards and paper and pencils and to do more writing.[10] Writing gives children a way to practice letter-sound relationships. Magnetic boards and letters can be used with young children who can't yet write with a pencil and may also promote the development of letter-sound knowledge.[11]

Many parents tutor preschool children in elements of reading, such as letter names.[12] Parents can do this through formal means such as workbooks or through opportunities that arise informally as part of everyday activities. Examples of informal instruction are pointing out letters on signs or writing messages on a magnetic board. In the home, informal instruction seems to work as well or better than formal, systematic approaches. Evidence of this comes from a study in which one group of parents was trained to teach their children to name letters and to identify sounds using a workbook. Children in another group, whose parents simply read to them, performed as well on beginning reading tasks as those whose parents had the training and the workbooks.[13]

For informal teaching to be successful, parents must be aware of what their children can learn and the experiences through which such learning will occur. They must know the importance of such matters as pointing out letters from the child's name on signs and containers. In a study comparing kindergarten children's knowledge, those who knew a lot about written language had parents who believed that it was their responsibility to seize opportunities to convey information about written language to their children.[14] Parents of children who had little knowledge did not share this belief.

Parents can affect children's learning from television programs that teach preschoolers about reading.[15] For example, parents can make sure that their children see the program regularly, and ask their children questions about the show to help them learn from it. Also important are parents' efforts to relate the program to other situations. For example, if children have learned the letter *m* and the sound associated with it on the show, drawing attention to other examples of words beginning with *m* is useful.

Computer software companies are developing beginning reading programs aimed at the lucrative home market. At this time, there is little solid information about the impact of computers on children's reading. However, a computer is an extraordinarily versatile piece of equipment, and it is only reasonable to suppose that it could play a useful role in learning to read.

The quality of the instruction incorporated in the computer software is sure to be paramount. Some software packages probably will provide children with good experiences; others probably will be nothing more than automated worksheets. Parents needs to shop carefully for software packages that provide worthwhile reading experiences. Furthermore, simply placing children in front of a computer terminal with a reading software program probably won't teach them to read. Based on accumulated experience with other media, it seems likely that even satisfactory reading software will have greater benefits if parents are actively involved in the ways suggested throughout this section.

Talking and Learning About Reading at School

Throughout the school years, parents continue to influence children's reading through monitoring of school performance, support for homework, and, most important, continued personal involvement with their children's growth as readers. Research shows that parents of successful readers have a more accurate view of their children's performance.[16] These parents know about the school's reading program. They visit their children's teachers, may observe in classrooms periodically, and are more likely to participate in home-school liaison programs.

In a study of children's achievement in the United States, Taiwan, and Japan, American parents were found to consider homework to be of less value than Japanese or Taiwanese parents.[17] Perhaps as a consequence, American children spend much less time on homework that the Japanese or Taiwanese children. Studies in the United States show a small to moderate relationship between the amount of time students spend doing homework and their reading achievement.[18]

Depending upon the kind of homework they assign, teachers have been found to foster or undermine parental support. Some teachers ask students to complete worksheets at home, rather than asking them to read books, magazines, or newspapers.[19] Many of these worksheets are of questionable value in the classroom; they are even more so in the home. Parents sometimes perceive assignments as busywork. This irritates them. Parents may be asked to help with tasks that they cannot do themselves. This antagonizes them.

Most children will learn *how* to read. Whether they *will* read depends in part upon encouragement from their parents. Several researchers recently studied the amount of reading that middle-grade students do at home.[20] Those who read a lot show larger gains on reading achievement tests. They tend to come from homes in which there are plenty of books, or opportunities to visit the library, and in which parents and brothers and sisters also read. Their parents suggest reading as a leisure time activity and make sure there is time for reading. For example, some limit TV watching or have an established bedtime hour after which reading is the only activity permitted other than going to sleep.

Parents of avid readers favor having teachers require students to read library books and believe that their children read more when teachers do so.[21] However, they do not endorse required reading of particular books. They favor the principle of allowing their children to choose their own books, although they acknowledge that they themselves disapprove of an occasional choice.

Parents often ask about the effect of television on reading. Within reason, television viewing does not appear to interfere with learning to read. Up to about ten hours a week, there is actually a slight positive relationship between the amount of time children spend watching TV and their school achievement, including reading achievement.[22] Beyond this point, the relationship turns negative and, as the number of hours of viewing per week climbs, achievement declines sharply.

There is evidence that confirms that TV programs especially designed to have educational value for young children do in fact promote reading.[23] Further, a dramatization of a novel or an animated production of a favorite cartoon strip can encourage children to read the book or the newspaper. Though research does not prove the point, common sense suggests that, depending on the age of the child, documentaries, newscasts, good drama, and wildlife, natural history, and science shows will also contribute to reading achievement. On the other hand, programs that are unlikely to have any redeeming educational value will come readily to any parent's mind. Prudent parents will want to influence the quality of the programs their children watch as well as maintain reasonable limits on the amount of viewing.

In conclusion, parents play roles of inestimable importance in laying the foundation for learning to read. A parent is a child's first guide through a vast and unfamiliar world. A parent is a child's first mentor on what what words mean and how to mean things with words. A parent is a child's first tutor in unraveling the fascinating puzzle of written language. A parent is a child's one enduring source of faith that somehow, sooner or later, he or she will become a good reader.

On a more sober note, parents' good intentions for their children are not enough. Parents must put their intentions into practice if their children are to have the foundation required for success in reading.

Reading Instruction in Kindergarten

Until the 1960's, kindergartens served primarily as a transition between home and school. Children learned to work with unfamiliar adults, get along with other children, and adjust to the routine of school. Traditional kindergartens also aimed to convey a variety of kinds of common knowledge and to develop general social, physical, and intellectual skills. Kindergartens still serve these functions, but now, in addition, there is an increasing expectation that systematic reading instruction will begin in kindergarten. Indeed, in many communities today kindergartens employ a simplified version of what used to be first-grade reading instruction.

The changing expectations for kindergarten stem from a new understanding of what children are capable of learning, which will be detailed in the next section, and also from recent trends in the society, notably the steady increase in the number of working women with young children. These children attend nursery schools and daycare centers that socialize them to school and develop some of the knowledge and skill formerly acquired in kindergarten.

When Should Systematic Reading Instruction Begin?

According to a view dating back to the 1930's, children are "ready" to learn to read only when they reach a certain level of maturity.[24] The typical child was thought to reach this level at the age of about six and one-half, though the time might be earlier or later for particular children depending upon their physical, social, and intellectual development. Until a child reached the requisite level of maturity, it was believed that systematic reading instruction would be unproductive or even harmful.

There is a kernel of good sense in the idea of readiness for instruction. Formal, organized instruction may be unproductive for children who still cry when their mothers leave them at school, who cannot sit still in their seats, or who cannot follow simple directions. However, the concept of readiness, as it was formulated in the decades following 1930, has proved to be too global.

In the past, under the belief that it would develop readiness for reading, kindergarten children were taught to hop and skip, cut with a scissors, name the colors, and tell the difference between circles and squares. These may be worthwhile activities for four- and five-year-olds, but skill in doing them has a negligible relationship with learning to read.[25] There are schools, nonetheless, that still use reading readiness checklists that assess kicking a ball, skipping, or hopping. Thus, reading instruction is delayed for some children because they have failed to master these physical skills or other skills with a doubtful relationship to reading.

What the child who is least ready for systematic reading instruction needs most is ample experience with oral and printed language, and early opportunities to begin to write. These are the topics of the next three sections.

When should systematic reading instruction begin, then? There is a wealth of evidence that children can benefit from early reading and language instruction in preschool and kindergarten.[26] Available data suggest that the best short-term results are obtained from programs that can be characterized as formal, structured, and intensive,[27] though whether these programs have greater long-term benefits is less clear. Good results are also obtained with informal, though not haphazard, programs.[28]

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Based on the best evidence available at the present time, the Commission favors a balanced kindergarten program in reading and language that includes both formal and informal approaches. The important point is that instruction should be systematic but free from undue pressure. We advise caution in being so impatient for our children that we turn kindergartens, and even nursery schools and daycare centers, into academic bootcamps.

Developing Oral Language

Reading must be seen as part of a child's general language development and not as a discrete skill isolated from listening, speaking, and writing. Reading instruction builds especially on oral language. If this foundation is weak, progress in reading will be slow and uncertain. Children must have at least a basic vocabulary, a reasonable range of knowledge about the world around them, and the ability to talk about their knowledge. These abilities form the basis for comprehending text.

Listening comprehension proficiency in kindergarten and first grade is a moderately good predictor of the level of reading comprehension attained by the third grade.[29] Evidence about the later role of listening comprehension is even stronger. In a study involving a nationwide sample of thousands of students, listening comprehension in the fifth grade was the best predictor of performance on a range of aptitude and achievement tests in high school, better than any other measure of aptitude or achievement in the fifth grade.

Oral language experience in the classroom is especially important for children who have not grown up with oral language that resembles the language of schools and books. As the discussion of home experiences in the previous section revealed, some children have not been required to use language in reflective ways at home. When adult questions require children to reflect upon their experiences, mental processes that are needed for proficient reading are stimulated. Thus, kindergarten teachers need to capitalize on every opportunity to engage children in thoughtful discussion. Storybook reading is an especially good setting for such discussions. As they listen to stories, and discuss them, children will learn to make inferences about plots and characters.

While oral language facility is necessary for success in reading, it is not sufficient. To learn to read, children's environment must also be rich in experiences with written language.

Learning About Written Language

Children enter a typical kindergarten class with very different levels of knowledge about printed language,[31] and instruction needs to be adapted for these differences. One or two children, and sometimes more, may already be able to read simple stories. A handful may be totally unfamiliar with such basic concepts as a word, a sentence, and a letter, and may not even know that to read you hold a book right side up and turn the pages from front to back. Most children entering kindergarten today, however, will know more about reading and writing than children did a decade or two ago.

A staple of kindergarten reading instruction is teaching children to name the letters of the alphabet. However, increasing numbers of children can already do this when they enter kindergarten. In a 1984 study, beginning kindergarten children from a variety of backgrounds could name an average of 14 letters.[32]

Children's proficiency in letter naming when they start school is an excellent predictor of their first- and second-grade reading achievement.[33] This fact seemingly supports the practice of having kindergartners learn letter names. Probably, however, knowledge of letter names is not important in itself so much as it is a reflection of broader knowledge about reading and language. This conclusion follows from the further fact that, when children who do not know the letter names on entering kindergarten are trained to name them, they show little later advantage in reading. In contrast, children taught the sounds letters make, as well as their names, show better reading achievement than children who receive only instruction in letter names.[34]

Research establishes that children learning to read require concepts about the broader purposes of printed language, as well as the specific skills required to recognize letters and words and match letters and sounds.[35] Learning about reading and writing ought to occur in situations where written language serves functions such as to entertain (as in books), to inform (as in instructions on packages), or to direct (as on traffic signs). In other words, children need to learn about the functions of written language and about what adults mean when they talk about "reading". Children must also learn about the relationship between oral and written language and the relationship between written language and meaning. For example, they need to know about the relationship between the letter combination STOP, the spoken word "stop", and the meaning of stop - to cease motion.

Even children from homes where adults have not provided them with extensive exposure to printed language have some knowledge about reading and writing that can form the basis for early instruction. For instance, they may be able to recognize words that appear on cereal boxes, t-shirts, billboards, or toys. However, they often jump to incorrect conclusions about words: They may think that the brand name on a toothpaste tube says "toothpaste" or "brush your teeth," indicating that they are paying more attention to the context than to the specific features of the word. Nonetheless, familiar words are especially useful for teaching children letter names and letter-sound relationships, because children can learn to recognize familiar words prior to knowing all the letters.[36]

Young children enjoy hearing the same story read over and over again, a fact that can be used as a fulcrum for beginning reading instruction. Books such as *This is the House That Jack Built* contain repeated phrases that make it possible for children to participate by reading the repetitive part with an adult. Through reading along, children achieve what one writer calls "wholebooksuccess" : They get the satisfaction of reading real books.[37] After a story has been read in this fashion, words from the story can be printed on charts and sentence strips so that the children can begin to recognize the words outside the helpful context of the familiar book.

In conclusion, kindergarten teachers must be mindful of the fact that there can be an extraordinarily wide variation in the knowledge that kindergarteners have about reading. Some children may not have even the most basic ideas. When a concept such as a word and concepts about the functions of printed language are taken for granted by teachers and the publishers of instructional materials, children can be left huffing and puffing over the sounds that letters make with only the faintest idea of what they are doing. Early instruction must provide these children with underlying concepts about the functions of reading and writing as well as with specific information about letters, sounds, and words. On the other hand, for those who come to kindergarten already reading simple stories, none of this basic teaching may be necessary. Thus, the essential principle of all good teaching - estimate where each student is and build on that base - is doubly important for kindergarten teachers.

Learning to Write

Writing is important in its own right. Beause of the interrelatedness of language, learning to write also aids in reading development. For many young children, the desire to communicate provides an incentive for using written language. In an investigation of children who read before they entered first grade, the parents described these children as "paper-and-pencil kids".[38] For some, in fact, learning to read was a byproduct of

Writing experience in the kindergarten should not overemphasize handwriting practice. In addition to beginning to learn to print, children need to learn that writing is composing a message using their own words to communicate with other people. Children can do quite a bit of writing before they are able to use a pencil well. For example, preformed plastic and metal letters used on felt or magnetic boards allow young children to write without the constraints of handwriting. In the early 1960's, a program in which preschoolers wrote on typewriters reported success in teaching children to read.[39] Currently, data are being gathered on the value for preschool children of simple word processing programs on microcomputers. As their motor coordination improves, children will acquire greater facility with pencils and pens. Until that point, however, they can have much-needed experience with writing using means that do not require them to form letters by hand.

When children do not feel too constrained by requirements for correct spelling and penmanship, writing activities provide a good opportunity for them to apply and extend their knowledge of letter-sound correspondences.[40] Many preschool children's spelling does not comply with standard spellings. In time, these children will use standard spellings but not before moving through the fairly well documented stage of "invented" spelling.[41] For example, children may initially write *t* for the word *tame*. Several months later, this may become *tm*, followed by *tam*, and finally *tame*.

Children's spelling becomes more conventional and they become facile at handwriting if they are given numerous opportunities for writing.[42] Reasons for writing can be found in any kindergarten classroom. For example, children can write captions for their pictures or address invitations. Their initial attempts may be only a single letter or word. Next they may move on to a phrase, such as "I love you," as they write a note to a favorite adult. These writing activities lay the foundation for letter writing and story writing. They also provide children with reasons to communicate, to apply their knowledge of written language, and to read their own writing and that of others.

Reading in the First Grade

Today many children begin to receive formal reading instruction in kindergarten. Once they reach the first grade, no matter what their kindergarten reading experience has been, it is virtually certain that they will receive formal, or structured, instruction. In most classrooms, the instruction will be driven by a basal reading program. For this reason, the importance of these programs cannot be underestimated and will be briefly discussed here.

Basal Reading Programs

Basal reading programs are complete packages of teaching materials. They provide an entire reading curriculum (summarized in what is called a "scope and sequence chart"), instructional strategies for teaching reading (through teachers' manuals), a graded anthology of selections for children to read (through student Readers), and practice exercises (through workbooks and skill sheets). In addition, there are numerous optional and supplementary materials (e.g., management and testing systems; visual aids such as word cards, sentence cards and picture cards; audio tapes; film strips; supplementary books). Basal reading programs are organized by grade level with most programs beginning at kindergarten and continuing through the eighth grade. An entire basal reading program would make a stack of books and papers four feet high.

The observation that basal programs "drive" reading instruction is not to be taken lightly. These programs strongly influence how reading is taught in American schools and what students read. This influence is demonstrated by studies that have examined how time and instructional materials are used in classrooms. The estimates are that basal reading programs account for from 75 percent to 90 percent of what goes on during reading periods in elementary school classrooms.[43]

How closely do teachers follow basal reading programs? A number of classroom studies indicate that, for the most part, teachers follow the instructional strategies prescribed in the teachers' manuals and that students use the Readers and workbook materials.[44] These studies do not suggest, however, that teachers use *all* of the available materials, or that they incorporate all of the recommended procedures in the teachers' manuals. Yet, the studies conclude that basal programs account for a large part of teachers' and students' time during the reading period.

Basal reading programs typically are developed by teams of authors who work with editors of educational publishing companies. These companies market their programs to schools throughout the United States. Although over a dozen well-known basal reading programs are on the market, about 70 percent of American schools buy one or more of the five best-selling programs. While membership in the "top five" varies from decade to decade, it can be asserted with a fair degree of certainty that a small number of basal reading programs have a strong influence on *how* American children are taught to read and *what* American children read.

Word Recognition and Beginning Reading

One of the cornerstones of skilled reading is fast, accurate word identification.[45] Well into the 20th century almost all children in this country were started on the road to skilled word identification by teaching them the letters of the alphabet, the sounds the letters make and, using this knowledge, how to sound out words. During the first third of this century, educators such as William S. Gray were responsible for turning American schools away from what they perceived to be the "heartless drudgery" of the traditional approach.[46] In its place, Gray and others advocated the look-and-say approach. The thinking was that children would make more rapid progress in reading if they identified whole words at a glance, as adults seem to do.

The look-say approach gradually came to dominate the teaching of beginning reading.[47] Nonetheless, educators continued to debate the best way to introduce children to reading. Rudolph Flesch brought the debate forcibly to the public's attention in the mid-l950's with his book, *Why Johnny Can't Read*, in which he mounted a scathing attack against the look-say method and advocated a return to phonics.[48] More influential in professional circles, though, was Jeanne Chall's now-classic book a decade later, *Learning to Read: The Great Debate*. Chall concluded on the basis of evidence available at the time that programs that included phonics as one component were superior to those that did not.[49]

The question, then, is how should children be taught to read words? The answer given by most reading educators today is that phonics instruction is one of the essential ingredients. All the major published reading programs include material for teaching phonics to beginning readers. Thus, the issue is no longer, as it was several decades ago, whether children should be taught phonics. The issues now are specific ones of just how it should be done.

Intuitively it makes sense that beginning readers receive phonics instruction because English is an alphabetic language in which there are consistent, though not entirely predictable, relationships between letters and sounds. When children learn these relationships well, most of the words in their spoken language become accessible to them when they see them in print. When this happens, children are said to have "broken the code."

What does research indicate about the effectiveness of phonics instruction? Classroom research shows that, on the average, children who are taught phonics get off to a better start in learning to read than children who are not taught phonics.[50] The advantage is most apparent on tests of word identification, though children in programs in which phonics gets a heavy stress also do better on tests of sentence and story comprehension, particularly in the early grades.

Data on the long-term effects of phonics instruction are scanty. In one of the few longitudinal studies, children who had received intensive phonics instruction in kindergarten or first grade performed better in the third grade than a comparison group of children on both a word identification test and a comprehension test. By the sixth grade, the group that years earlier had received intensive phonics instruction still did better than the comparison group on a word identification test but the advantage in comprehension had vanished.[51] The fact that an early phonics emphasis had less influence on comprehension as the years passed is probably attributable to the increasing importance of knowledge of the topic, vocabulary, and reasoning ability on advanced comprehension tests.

The picture that emerges from the research is that phonics facilitates word identification and that fast, accurate word identification is a necessary but not sufficient condition for comprehension. More will be said about the need for comprehension instruction in tandem with phonics instruction later. Here, the features that distinguish types of phonics instruction will be discussed.

Issues in the Teaching of Phonics

Phonics is instruction in the relationship between letters and speech sounds. The goal of phonics is not that children be able to state the "rules," governing letter-sound relationships. Rather, the purpose is to get across the alphabetic principle, the principle that there *are* systematic relationships between letters and sounds. Phonics ought to be conceived as a technique for getting children off to a fast start in mapping the relationships between letters and sounds.

It follows that phonics instruction should aim to teach only the most important and regular of letter-to-sound relationships, because this is the sort of instruction that will most directly lay bare the alphabetic principle. Once the basic relationships have been taught, the best way to get children to refine and extend their knowledge of letter-sound correspondences is through repeated opportunities to read. If this position is correct, then much phonics instruction is overly subtle and probably unproductive. For instance, many reading programs not only teach the speech sounds represented by the letters *b*, *l*, and *r*, but then they go on to directly teach the sounds associated with *bl* as in *black* and *br* as in *break*. This instruction is provided even to children who can read words containing *bl* and *br* flawlessly!

Thus, a number of reading programs, including ones not known for providing intensive phonics, try to teach too many letter-sound relationships and phonics instruction drags out over too many years. These programs seem to be making the dubious assumption that exposure to a vast set of phonics relationships will enable a child to produce perfect pronunciations of words. The more reasonable assumption is that phonics can help the child come up with approximate pronunciations - candidates that have to be checked to see whether they match words known from spoken language that fit in the context of the story being read.

There are essentially two approaches to phonics instruction - explicit phonics and implicit phonics.[52] The following discussion will address only the major differences between the two approaches. In practice, there are similarities in the instructional strategies used in explicit and implicit phonics programs as well as differences among explicit programs and among implicit programs.

In explicit phonics instruction, the sounds associated with letters are identified in isolation and then "blended" together to form words. For example, the teacher may write the letter *s* on the chalkboard and tell the children that the letter makes the sound /s/, or point to the *s* in the word *sat* and say that it begins with /s/.[53] During a typical explicit phonics lesson, the children will be asked to produce the sounds of letters that appear in isolation and in words.[54]

A critical step in explicit phonics instruction is blending the isolated sounds of letters to produce words. To help children blend the sounds in the word *sit*, for example, a teacher may begin by pointing to each letter and asking the children to say the separate sounds, /s/ /i/ /t/. Next the teacher may model blending by extending the sounds /ssiit/ and then collapsing the sounds together to yield *sit*.

Blending may seem simple to an adult who already knows how to read, but in fact it is a difficult step for many children. Until a child gets over this hurdle, learning the sounds of individual letters and groups of letters will have diminished value. Research indicates that teachers who spend more than average amounts of time on blending produce larger than average gains on first- and second-grade reading achievement tests.[55] Regrettably, an analysis of published reading programs concluded that several incorporate procedures for teaching blending that are unlikely to be effective with many children.[56]

In implicit phonics instruction, the sound associated with a letter is never supposed to be pronounced in isolation. Instead, in an implicit program the teacher might write a list of words on the board such as *sand, soft, slip* and ask the children what all the words have in common. When the letter name *s* has been elicited, the teacher would tell the children that, "The letter *s* stands for the sound you hear at the beginning of *sand, soft* and *slip*." To figure out the sound of a letter in a word to be read, children receiving implicit phonics instruction may be told, "This word begins with the letter *s*, so you know the word begins with the sound for *s*" or "think about other words you know that begin with the same letter."[57]

How is phonics taught in this country? No large-scale descriptions are available, but the fact that the most widely-used reading programs employ implicit phonics instruction suggests that this is the most prevalent way. However, classroom observation suggests that some teachers, at least, may not always follow the principles of implicit phonics. In a recent study, several first-grade teachers ostensibly using one or another implicit phonics program were observed.[58] Contrary to the recommendations in the teachers' manuals, they all produced the separate sounds of consonants and vowels apart from words. When asked why they did this, the teachers gave similar explanations. In the words of one of them, "That's how they hear it [the speech sound] best."

Analyses have revealed some specific problems with both implicit and explicit phonics. A problem with implicit phonics is that it places stress on an ability called "phonemic segmentation." This is the ability to identify separate speech sounds in spoken words. There is evidence that many young children cannot extract an individual sound from hearing it within a word.[59] This ability may depend upon already having learned something about the sounds associated with the separate letters. For instance, children who do not already have some idea of the sounds of the letters in *sit* may not be able to single out the short /i/ sound when they hear the word spoken. Hence, when the teacher tells the children that the letter *i* "has the sound you hear in the middle of *sit*," they may not be able to make the connection. Ironically, therefore, implicit phonics may actually presuppose what it is supposed to teach.

On the other hand, a problem with explicit phonics is that both teachers and children have a difficult time saying pure speech sounds in isolation. The *b* sound becomes /buh/, for instance. When figuring out a new word, the child who has been taught the sounds of letters in isolation may produce /buh-ah-tuh/ and never recognize that the word is *bat*. This problem may be more hypothetical than real, since there does not appear to be evidence that hearing or producing imprecise speech sounds is an actual obstacle to figuring out words, provided that the words are ones the children know from their spoken language and the words are encountered in a meaningful context.

All that phonics can be expected to do is help children get approximate pronunciations. These must be "tried out" to determine whether recognizable words have been produced that make sense in the context. When the process is working smoothly, it is not likely, for instance, that in the course of reading a story about pets a child would read "...dogs and cuh-ah-tuhs."[60]

Some authorities fear that a heavy emphasis on explicit phonics will interfere with the development of skill in meaningful, constructive reading. One basis for this fear comes from the analysis of children's errors during oral reading. Oral reading errors provide a window into what is going on inside children's heads as they read. Research suggests that first graders taught through an explicit phonics approach make more nonsense errors than other children.[61] These are errors that either are not words in English or are English words that make no sense in the story being read.

Other authorities contend that nonsense errors made by beginning readers are merely an indication that children are trying to use information about letters and sounds. Research does suggest that making these errors is a stage that will pass once more fluency is developed and the children have learned to make use of all of the information available about a word's pronunciation and meaning.[62] A recent study found that by the time they had reached the third grade, children who had begun in the first grade with intensive, explicit phonics were making no more nonsense errors than other children.[63]

Phonics instruction in general has been criticized for leading children away from meaning.[64] Probably, this is not an inherent flaw of either explicit or implicit phonics. It may, however, be a flaw in the design of particular programs. Quite likely the problem is simply a by-product of the false dichotomy between phonics and meaning that has dominated the field of reading for so many years. In an excess of zeal to get phonics across, some programs introduce the sounds of many letters before providing opportunities to use what has been learned in reading words in sentences and stories.

Which works better, then, explicit or implicit phonics? When the criterion is children's year-to-year gains on standardized reading achievement tests, the available research does not permit a decisive answer, although the trend of the data favors explicit phonics.[65]

In the judgment of the Commission, isolating the sounds associated with most letters and teaching children to blend the sounds of letters together to try to identify words are useful instructional strategies. These are the strategies of explicit phonics. However, research provides insufficient justification for strict adherence to either overall philosophy. Probably, the best strategy would draw from both approaches. For example, the sounds of some letters such as *r*, which are especially difficult to produce correctly in isolation, might be introduced best using the implicit approach.

Further, letter-sound relationships should always be lavishly illustrated with words. These provide concrete exemplars for what can otherwise be confusing, abstract rules. When children are encouraged to think of other words they know with similar spellings when they encounter a word they cannot readily identify, they are probably helped to develop the adult strategy of decoding unknown words by analogy with ones that are known.[66] This is a strong feature of the implicit approach, which is intrinsically word based. Of course, explicit phonics programs do illustrate letter-sound relationships with words, but the instruction in some of these programs would be strengthened if more attention were paid to systematically providing words to serve as concrete exemplars.

In summary, the purpose of phonics is to teach children the alphabetic principle. The goal is for this to become an *operating principle* so that young readers consistently use information about the relationship between letters and sounds and letters and meanings to assist in the identification of known words and to independently figure out unfamiliar words. Research evidence tends to favor explicit phonics. However, the "ideal" phonics program would probably incorporate features from implicit phonics as well. The Commission believes that the approaches to phonics recommended in programs available today fall considerably short of the ideal, and we call for renewed efforts to improve the quality of instructional design, materials, and teaching strategies.

The right maxims for phonics are: Do it early. Keep it simple. Except in cases of diagnosed individual need, phonics instruction should have been completed by the end of the second grade.

Phonics and Reading Selections for the Beginning Reader

No matter how children are introduced to words, very early in the program they should have experience with reading these words in meaningful texts. The discussion in this section is about the relationship between what children are learning about phonics and the selections they read in their primers.[67] Selections in primers are typically very short and written with a limited set of words.[68] Selections for older students who have acquired basic reading skill are considered in the chapter on Extending Literacy. Obviously, these selections are longer and more complex than those in primers.

Writing the first selections a child will read is a difficult balancing act. Ideally, the selections will be interesting (so that students will *want* to read them), comprehensible (so that students are able to *understand* them), and instructive (so that students will *learn* from them). But how can selections be made interesting when most of the children don't know how to read very many words? How can stories be comprehensible when they must be written with a severely limited set of words? How can selections be instructive so as to most effectively provide students with the opportunity to practice what they are being taught, and at the same time be interesting and comprehensible?

The reality is, that because the number of words that beginners can identify is still very limited, the few short sentences in the earliest school reading selections cannot, in themselves, tell complete stories. Meaning must be constructed not only from the few meager sentences, but also from picture clues and information provided by the teacher or elicited from the children during discussion. This is one of the reasons why early reading lessons are so full of pictures and intervening discussion.

As will be detailed in the next section on Comprehension and the Beginning Reader, the manner in which programs and individual teachers handle early reading lessons is not always optimum. In the meantime, the point is that from the very beginning children should be given *all* of the elements necessary for constructing meaning. This is important because reading at this early level is a new enterprise, and children must be made aware that reading is always directed toward meaning.

Each encounter with a reading selection should serve the dual goals of advancing children's skill at word identification *and* helping them to understand that reading is a process not simply of word recognition, but one of bringing ideas to mind. There is a reciprocal relationship between word identification and comprehension. The selections written for children to read in school should exploit this relationship. As skill at word identification grows, a larger number of printed words becomes accessible to the young reader. As the number of accessible words increases, more coherent and interesting texts come within reach of the child. More coherent texts contain more clues to pronunciation and meaning which, in turn, leads to more fluent word identification.

There are methods for introducing children to reading that begin with more natural selections that do comprise complete stories. These methods, which will be lumped under the label "whole language" approaches, were briefly sketched in the section on Reading Instruction in Kindergarten. It is noteworthy that these approaches are used to teach children to read in New Zealand, the most literate country in the world, a country that experiences very low rates of reading failure.[69] However, studies of whole language approaches in the United States have produced results that are best characterized as inconsistent. In the hands of very skillful teachers, the results can be excellent. But the average result is indifferent when compared to approaches typical in American classrooms, at least as gauged by performance on first- and second-grade standardized reading achievement tests.[70]

In the typical American basal reading program, selections in primers are written using sets of words chosen according to one of two criteria:
1) useful words that appear with great frequency in the language and are thus likely to be in young children's listening and speaking vocabularies; or
2) words that exemplify the letter-sound relationships being introduced in phonics instruction.

To illustrate the difference depending upon which of these two criteria are used, the following are the first several sentences from a little story that would be read by typical first graders in approximately November.

"We have come, Grandma," said Ana.
"We have come to work with you."
"Come in," Grandma said.
"Look in the book," said Grandma.
"Mix this and this."[71]

In this 26 word excerpt, there are 17 different words. Of these 17, only 8 could be decoded entirely on the basis of letter-sound relationships that have been introduced in the program's phonics lessons.

Now consider the following few sentences of a story from a different program that would also be read in about November of first grade.

Ray loads the boat.
He says, "I'll row."
Neal says, "We'll both row."
They leave, and Eve rides home alone.[72]

Of the 18 different words in this 20 word excerpt, 17 could be decoded entirely on the basis of letter-sound relationships that students should know from the program's phonics lessons. Notice, though, that this selection contains a few words, such as *loads* and *row*, that are a little less likely to be known by some first graders than the words in the first selection, and perhaps somewhat less useful in reading later selections.

Both these programs teach phonics. At the point where the children would read the selections excerpted above, both have introduced about 30 letter-sound relationships. But only the second program gives the child a good opportunity to use phonics in actual reading.

Phonics instruction is just the first step toward the ultimate goal of fast, accurate word identification and fluent reading. What must occur is that students become so familiar with letter-sound relationships that words are identified automatically, that is, with little conscious attention. This will happen more readily when students encounter in the materials they are reading words that embody the letter-sound relationships that are being taught.

An analysis of eight basal reading series has indicated, however, that there is little connection between the phonics lessons and the reading selections in the primers of the best-selling programs.[73] Phonics is poorly integrated because these programs introduce the most important and useful familiar words first. The probiem is that there is an irregular relationship between the spelling and the pronunciation of many of the most useful, familiar words. Consider, for instance, *said* and *come*. If they were regular, *said* would rhyme with *raid* and *come* would rhyme with *home*.

There has been a traditional sequence for introducing letter-sound relationships in phonics lessons. Briefly, children are taught consonant sounds, then short vowel sounds, then long vowel sounds in regular words such as *bake* and *kite*. When programs using this sequence seek perfect regularity between spelling and pronunciation, using only letter-sound relationships that have already been taught, the result can be selections for beginning readers comprised of deadly sentences such as, "Dan had a tan fan." Children do not require this much regularity to master the alphabetic principle. One key to writing more meaningful selections for young readers may be more flexibility in the choice of the order for teaching letter-sound relationships. Relationships could be introduced in an order that makes accessible the largest possible vocabulary of useful words.

The important point is that a high proportion of the words in the earliest selections children read should conform to the phonics they have already been taught. Otherwise they will not have enough opportunity to practice, extend, and refine their knowledge of letter-sound relationships. However, a rigid criterion is a poor idea. Requiring that, say, 90 percent of the words used in a primer must conform to letter-sound relationships already introduced would destroy the flexibility needed to write interesting, meaningful stories. What the field of reading does not need is another index that gets applied rigidly. What the field does need is an understanding of the concepts at work.

Is it possible to write interesting, comprehensible, and natural-sounding selections for young readers while at the same time constraining the vocabulary on the basis of letter-sound relationships? The answer is that it ought to be possible to come much closer to the ideal than the most widely-used programs do at the present time. The following guidelines may help: First, letter-sound relationships can be introduced in a sequence that would allow early use of as rich as possible a set of words while still exemplifying the alphabetic principle. Second, selections can include some useful irregular words without confusing children. Third, selections can include some regular words that embody letter-sound relationships that haven't been introduced yet, but are needed to make interesting, meaningful stories. Again, while it is essential that authors of primers have flexibility, a fairly high proportion of the words must conform to already-taught letter-sound relationships if phonics instruction is to have substantial value.

Children have an easier time understanding stories written in familiar language. Familiarity of language involves not only the familarity of words but also the familiarity of sentence structures. Children, and indeed, most readers, have a difficult time understanding sentences written in styles that they don't frequently hear or use. Even the speech of first-grade children is much more sophisticated than that in basal readers. First-grade children do not say "The cat is there. See the cat. It is black." More likely, a first-grade child would say, "There's a black cat over there." Research has suggested that when children are given a text that conforms to their speech patterns, they comprehend it better.[74]

Writing the first selections a child will read is "a difficult balancing act," to be sure. But there are examples of selections for young readers that meet the technical requirements for a controlled vocabulary and at the same time tell a story and use language in artful ways. One notable example is *Green Eggs and Ham* written by the famous children's author, Dr. Seuss.[75] Large publishing companies invest upward of $15,000,000 to bring out new basal reading programs. Within budgets of this size, surely it is possible to hire gifted writers who can create stories far superior to the standard fare. The Commission believes that the American people ought to expect and should demand better reading primers for their children.

Comprehension and Beginning Reading

The heart of reading instruction in American classrooms is the small group reading lesson in which the teacher works with some children while the rest complete assignments at their seats. This is the usual arrangement in first, second, and third grade, and sometimes beyond. The small group lesson provides the opportunity for instruction and practice on all aspects of reading. For the beginning reader, it is a major opportunity to acquire insights into comprehension and to link word identification and comprehension.

The typical teacher's major resource on how to conduct this lesson is the manual that is part of the commercial reading program the school district has purchased. The teacher's manual contains detailed suggestions for conducting every lesson, often in as much detail as the script for a play. Presented in bold type within the manual is the exact wording of statements that the teacher can make to students. For example, to begin a lesson the manual may suggest that the teacher say, "Today we're going to read a story about polar bears. Have any of you ever seen a polar bear in a zoo?" Further directions will then be given in plain type such as "Give children several moments to discuss polar bears. After that, read the introductory statement about the story."

Some school districts afford teachers the option of using any of a variety of materials and approaches to teach reading. More typical, though, is the district that requires the use of the basal reading program that it has purchased. Even these districts usually give teachers flexibility in whether or not they follow the teacher's manual word for word. Classroom observation and interviews with teachers suggest that, whether by choice or not, most teachers do rely on manuals.[76] The teachers' manuals that accompany the best-selling commercial reading programs suggest lessons with three basic parts: preparation, reading, and discussion.

Preparation. In the preparation phase, the teacher is supposed to introduce the new words that will be encountered in the day's basal reader selection and make sure the children possess the background knowledge required to understand the story. The preparation phase is one place where an aspect of comprehension may be explicitly taught or, in the primary grades, where phonics may be taught. The preparation phase may conclude with the teacher's stating a purpose or asking a question to guide reading.

Systematic classroom observation reveals that preparation for reading is the phase of the small group lesson that is most often slighted, or even skipped altogether.[77] Thus, as a rule, little focused attention is given to developing the background knowledge that will be required to understand the day's story. This is a topic on which teachers' manuals do include specific recommendations. When asked why they neither follow the recommendations in the manuals nor substitute instruction of their own design, teachers say they don't have the time.[78]

Several studies indicate that using instructional time to build background knowledge pays dividends in reading comprehension.[79] It must be warned, though, that there has been a rush of enthusiasm for this practice in professional circles. Teachers are receiving all manner of suggestions waving the banner of background knowledge, some of which may, indeed, be a waste of time. Teachers are being urged to engage children in activities and discussion that may range over too wide an array of topics.

Useful approaches to building background knowledge prior to a reading lesson focus on the concepts that will be central to understanding the upcoming story, concepts that children either do not possess or may not think of without prompting. The advice in teachers' manuals is often unfocused, as in the polar bear example at the beginning of this section.[80] Unstructured preparation may wander away from the concepts of central importance.

The effect of preparation for reading on children's recall of a story was examined in a study which compared unfocused preparation with preparation that highlighted the central ideas of the story.[81] The plot of the story involved a woman who wishes on a star, a raccoon who comes nightly to her doorstep to look for food, and some bandits. The raccoon's masked appearance frightens the bandits into dropping a bag of money, which the raccoon picks up and eventually drops at the woman's doorstep on his nightly search for food. Finding the money, the woman attributes it to her wish on a star.

The suggested steps for preparation in the teacher's manual led to a discussion of raccoons as clever, playful animals. Yet to understand the story, children must grasp the ideas of coincidence and habit, since the raccoon's habitual behavior allows the coincidences to occur. Children who received preparation that concentrated on these ideas did much better in remembering the central ideas of the story than children prepared according to the suggestions in the teacher's manual.[82]

Much of the research showing that it is essential for children to learn to construct meaning based on background knowledge, as well as information in the text, has been conducted recently. This probably explains the low priority this aspect of reading receives in most classrooms today. Teachers, principals, and reading supervisors are just now getting the opportunity to learn about the research and adjust their priorities.

Reading. The second phase of a typical lesson is reading the day's selection. A basic issue is the proper role for silent and oral reading considering the children's age and ability. Frequent opportunities to read aloud make sense for the beginning reader. In the first place, oral reading makes a tie with the experience children have had of reading in their homes, nursery schools, and kindergartens as adults have read to them. Further, oral reading makes observable aspects of an otherwise unobservable process, providing teachers with a means for checking progress, diagnosing problems, and focusing instruction. Not to be underestimated is the function oral reading serves in providing young children a way to share their emerging ability with their parents and others.

Nor should oral reading be discarded altogether once children are fairly skilled readers. Opportunities to read aloud and listen to others read aloud are features of the literate environment, whatever the reader's level. There is no substitute for a teacher who reads children good stories. It whets the appetite of children for reading, and provides a model of skillful oral reading. It is a practice that should continue throughout the grades. Choral reading of poetry and reading plays also contribute to oral reading skill and help keep oral traditions alive. However, as the reader moves beyond the initial stages of literacy, more time will be devoted to silent reading, since that is the form that skilled reading most often takes.

Current observations of American classrooms indicate that teachers do differentiate the amount of oral and silent reading according to the reader's level. A study of 600 reading-group sessions found that low-ability readers at the first-grade level read orally during about 90% of the time allocated to the lesson, while high-ability first-graders read aloud about 40% of the time. By Grade 5, low-ability groups spent somewhat over 50% of lesson time reading aloud whereas high-ability groups averaged less than 20%.[83]

The way oral reading is handled in the typical classroom may not be optimum. Authorities recommend that children read a selection silently before they read it aloud. Research suggests that this practice improves oral reading fluency.[84] However, classroom observations reveal that silent reading before oral reading is frequently omitted,[85] which is like being asked to perform a play without having read the script beforehand. Consequently, unless the children are already rather good readers, the reading is unnecessarily slow and halting, and the experience may be needlessly stressful for some children.

The value of oral reading depends in part on the way the teacher deals with mistakes. If a child makes a large number of mistakes, this usually means that the selection is too difficult and that the child ought to be moved to an easier one. Otherwise, a sensible rule of thumb is to ignore most mistakes unless the mistake disrupts the meaning of the text. Even professional oral readers, such as radio and TV announcers, frequently deviate from the text in small ways. When a teacher is compulsive about always conecting small mistakes, the child's train of thought will be interrupted.

Some teachers pay too much attention to correcting what they judge to be imperfections in the pronunciation of children, and thereby may interfere with comprehension. Overemphasis on standard pronunciation can be a serious problem when the child is not a native speaker of English or the child speaks a different dialect of English than the teacher. For instance, in one study a lesson was observed in which the children were reading a selection that contained the word *garbage*.[86] The white teacher interrupted a black child several times trying to get him to say /garrrbage/ instead of /gahbage/.

When a child makes an oral reading mistake that changes the meaning, the best technique is to first wait and see whether the child can come up with the right word without help. If not, the teacher should direct the child's attention to clues about the word's pronunciation or meaning, depending upon the nature of the error. When the word has been correctly identified, the child should be encouraged to reread the sentence. This helps to assure that the child assimilates the correction and can recover the meaning of the whole sentence. Research suggests that teachers who deal with oral reading errors in the manner that has just been outlined produce larger-than-average gains in reading achievement.[87] Teachers who routinely supply the correct word, or permit other children in the group to call out the correct word, get children in the habit of waiting passively for help.

When children read orally, it is most often in a format called "round robin reading." Each child in a reading group takes a turn reading aloud several lines or a page of the story. An issue in round robin reading is equal distribution of turns for reading among the children. When a teacher always calls on volunteers, it has been shown that assertive children get more than their share of turns. This is undesirable because there is evidence that the child reading aloud and directly receiving instruction from the teacher is getting more from the lesson than the children who are following along.[88] A simple method for equalizing opportunity is to move around the group giving each child a turn in order. This method has produced good results in several studies.[89]

A problem with round robin reading is that the quality of practice is often poor. This problem is acute in the low-ability group where children hear only other poor readers stumbling over words. This problem can be lessened by having the children read the selection silently beforehand.

Even under the best of circumstances, round robin reading is not ideal for developing fluency and comprehension. An alternative technique that has proved successful in small-scale tryouts is to have children repeatedly read the same selections until an acceptable standard of fluency is attained. This can be done in several ways: Small groups can read along with an adult or they can follow a tape-recorded version; they can practice silently and then read aloud to the teacher; pairs of children can take turns reading aloud to one another. Poor readers who engage in repeated reading show marked improvement in speed, accuracy, and expression during oral reading of new selections and, more important, improvement in comprehension during silent reading.[90] Repeated reading deserves consideration as an alternative to the conventional practice of having children read aloud new material every day. No one would expect a novice pianist to sight read a new selection every day, but that is exactly what is expected of the beginning reader.

In addition to oral reading, children of every age and ability ought to be doing more extended silent reading. The amount of time children spend reading silently in school is associated with year-to-year gains in reading achievement.[91] Even young readers benefit from opportunities for silent reading. For instance, increased silent reading for beginners is one of the features of a very successful program for low-income Hawaiian children who are otherwise at risk for educational failure.[92]

To summarize, classroom time spent on either oral or silent reading is time well spent. Even beginning readers should do more silent reading. They should usually read silently before they are asked to read aloud. Getting the most from the customary practice of round robin oral reading requires the teacher to distribute turns equally among the children, skillfully handle mistakes, and focus attention on meaning. But alternatives to round robin reading of new material, such as repeated reading, appear to hold more promise for promoting reading fluency and comprehension.

Discussion. Following the reading of a selection, the final phase of a typical reading lesson is discussion. In the primary grades, there are brief discussions after each section of the selection and a longer discussion when the whole story has been completed. In the intermediate grades, the interspersed discussion periods are not usually present. The discussion phase is a place where the teacher may provide direct instruction in some aspect of reading comprehension, using the day's selection for illustration. In the primary grades, this is the point where phonics instruction is usually provided. The last thing the teacher does is explain the seatwork assignment and make sure the children understand what they are supposed to do before they return to their seats.

A clear finding from research of the past decade is that young readers, and poor readers of every age, do not consistently see relationships between what they are reading and what they already know.[93] Research also establishes that questions asked during the discussion phase of a lesson are a useful tool for helping children see relationships. Questions that lead children to integrate information about the central points of a selection with their prior knowledge significantly enhance reading comprehension.[94]

Classroom research indicates that teachers make heavy use of manuals when leading discussions.[95] Manuals include a large number of questions for each story, and most of them are asked during a typical lesson. While research verifies that asking well-crafted questions can be an important means of promoting comprehension, analysis of the questions in manuals reveals many that are poorly crafted - too general, leading the children's thinking afield; or trivial, focusing their thinking on unimportant details.[96]

Questions are a means of conveying to students the points they should be attempting to understand as they read future selections as well as a means for checking to see that they have understood the selection they have just read. Thus, questions following a story should probe the major elements of the plot. If the story has a moral, discussion should bring out this deeper meaning.

No piece of advice about questioning has been repeated more often than the proscription, "Don't ask too many detail questions." For instance, if a story were to say that Sally was wearing a red dress, teachers may be warned against asking about the color of her dress. This advice is incomplete, however. The question is perfectly sensible if the color of Sally's dress figures in the plot. A more complete statement about questions is that, as a general rule, they should be formulated to motivate children's higher-level thinking. When questions about details are asked, usually they should be links in a chain of questions that lead to an inference about a hard-to-understand part of the passage or an understanding of the selection as a whole.

While questions during the preparation and discussion phases of a reading lesson are important, these do not substitute for active, direct instruction. In direct instruction, the teacher explains, models, demonstrates, and illustrates reading skills and strategies that students ought to be using.[97] There is evidence that direct instruction produces gains in reading achievement beyond those that are obtained with only less direct means such as questions.[98]

The emphasis during reading lessons should be on understanding and appreciating the content of the story. Lessons in which the children do little else but take turns reading the story, and the teacher does little else but correct reading errors, are ineffective. Teachers should periodically ask students questions that lead them to understand the critical points of the story. As needed, the teacher should explain points that students have confused or demonstrate skills that students should be using.

In conclusion:

o Parents play roles of inestimable importance in laying the foundation for learning to read. Parents should informally teach preschool children about reading and writing by reading aloud to them, discussing stories and events, encouraging them to learn letters and words and teaching them about the world around them. These practices help prepare children for success in reading.

o Parents have an obligation to support their children's continued growth as readers. In addition to laying a foundation, parents need to facilitate the growth of their children's reading by taking them to libraries, encouraging reading as a free time activity, and supporting homework.

o Kindergarten programs should emphasize oral language and writing as well as the beginning steps in reading. Reading builds on oral language facility, concepts about the functions of printed language and a desire to communicate through writing, as well as specific knowledge about letters and words.

o Phonics instruction improves children's ability to identify words. Useful phonics strategies include teaching children the sounds of letters in isolation and in words, and teaching them to blend the sounds of letters together to produce approximate pronunciations of words. Another strategy that may be useful is encouraging children to identify words by thinking of other words with similar spellings. Phonics instruction should go hand in hand with opportunities to identify words in meaningful sentences and stories. Phonics should be taught early and kept simple.

o Reading primers should be interesting, comprehensible and instructive. To be most instructive, primers must contain many words that can be identified using phonics that has already been taught. There is a natural relationship between word identification and comprehension. Primer selections should be written to exploit this relationship. After the earliest selections, primers should tell complete, interesting stories.

o Both oral and silent reading are important for the beginner. Children should read selections silently before they are asked to read them orally. Getting the most from oral reading requires the teacher to distribute turns for reading equally, skillfully handle mistakes, and keep the emphasis on meaning.

o Reading lessons should stress understanding and appreciating the content of the selection. Discussions before reading and discussions and questioning after reading should motivate children's higher level thinking, with an emphasis on making connections with their prior knowledge of the topic. In addition to asking questions, teachers should directly instruct children in skills and strategies that help them become better readers.

Extending Literacy

Children still have much to learn about reading even when they can decode words with a fair degree of facility and can understand simple, well-written stories. Increasingly, though, as proficiency develops reading should be thought of not so much as a separate subject in school but as integral to learning literature, social studies, and science.

Even for beginners, reading should not be thought of simply as a "skill subject." It is difficult to imagine, for instance, that kindergarteners could be called literate for their age if they did not know *Goldilocks and the Three Bears* or *Peter Rabbit*. For each age, there are fables, fairy tales, folk tales, classic and modern works of fiction and nonfiction that embody the core of our cultural heritage. A person of that age cannot be considered literate until he or she has read, understood, and appreciated these works.[1]

This chapter deals with three essential factors that influence whether the young readers will be able to extend their skill to meet the challenges of subject matter learning. The first is the quality of school text books. The second is the nature of the instruction that teachers provide. The third is opportunities for meaningful practice.

School Textbooks

Authors and editors face many pressures as they prepare the selections that comprise basal readers and write the textbooks intended for older children who have acquired the rudiments of reading skill. The criteria for vocabulary control that must figure in the design of primers are supplemented and then replaced by other criteria as the selections get longer. The selections must reflect classic literary traditions. At the same time some selections must be "timely" so that modern students will relate to them. Selections on history, geography, and science must be accurate and informative. To these criteria are added the demands of special interest group seeking to influence the topics that will be presented in schoolbooks and the way in which these topics are handled.

The remainder of this section deals with two of the most pressing and important issues in writing school textbooks. The first is controlling the difficulty and appropriateness of textbooks. The second is designing the bridges that help young readers make the transition from simple stories to more complicated reading material.

Controlling the Difficulty of Schoolbooks

A vexing problem for textbook writers is matching the difficulty level of the material to the ability level of the child for whom the material is intended. It is obvious that *Pride and Prejudice* is unsuitable for a seven-year-old. But it is much less obvious just what material would have a suitable level of difficulty for a child of this age. Educators have long wanted a simple, objective method for determining an appropriate difficulty level for schoolbooks. In response, several decades of research and development have been invested in easy-to-use methods. The result is what are called "readability formulas."

The formulas now in use encompass two features of written language: The length of the sentences, expressed as an average in a sample of a book's text; and, the complexity of the words used, also expressed as an average (in number of unfamiliar words, or number of syllables) in a sample of the text.

An example of how one common readability formula is applied to a passage is as follows.[2] Three sample passages of 100 words each are randomly selected from a reading selection. For each passage, the number of words per sentence and the number of syllables per word are computed. These figures are averaged over the three samples to give an estimate of the sentence length and an estimate of the word length for the entire selection. All that remains is to refer to a graph, plotting word length on one side of the graph and sentence length on the other. The point of intersection on the graph gives the approximate grade level for which material is appropriate, without actually having to insert the numbers into a formula and perform any calculations. For example, a story with an average sentence length of 14 words and an average word length of 1.24 syllables is estimated to be appropriate for a typical child in the fifth grade. If the sentences averaged only 12 words and the word length was 1.24, the material would be estimated as appropriate for an average child in the fourth grade.

As this illustration indicates, readability formulas are easy to apply. The formulas also give a fairly good prediction of how difficult typical students will find a book.[3] For these reasons schools have come to depend on readability formulas to appraise the difficulty and appropriateness of schoolbooks. Most schools will not purchase material that does not satisfy one of the formulas.

To sell their textbooks, publishing companies face a temptation to "write to formula." However, this is a purpose for which the formulas were never intended. As one authority on readability has admonished, "merely shortening words and sentences to improve readability is like holding a lighted match under a thermometer when you want to make your house warmer."[4]

Important features of text, such as the logical organization of ideas and the clarity of sentence structures, don't show up in the measurements taken to calculate readability. It is quite possible to write a disorganized text, full of incomprehensible sentences, and still achieve a desired readability score.[5] Indeed, dividing long sentences into shorter sentences and substituting familiar words for less familiar words can make a text more difficult to understand. This seeming contradiction is easy to explain. When a long sentence is divided into shorter sentences, a reader often has to make more inferences. This is because words that connect ideas such as *so, because*, and *since* in long sentences are omitted when the sentence is divided. For example, compare the following passages in which an original text has been rewritten to conform to a readability formula:

> (original)
> Little Hippo was the pet of the herd. Every morning the big hippos waited for him to wake up so they could take care of him.
>
> (rewritten)
> Every morning was the same for Little Hippo. All the big hippos would wait for him to get up. They wanted to take care of him.[6]

To reduce sentence length, a compound sentence has been broken into two simple sentences by deleting the conjunction *so*. But the connection between the two pieces of information is now left vague. Consequently, the reader has to infer that the big hippos were eager for Little Hippo to wake up *because* they enjoyed taking care of him.

Similarly, substituting familiar words for less familiar words to conform to a readability formula can also make a text more difficult to understand. When a common word is substituted for a less common word, the common word may be less informative. A reader may have fewer clues to the meaning originally intended by the author. For example:

(original)

One morning Little Hippo felt cross. 'I don't want lily pads and corn', he grumbled. 'I wish the hippos wouldn't watch everything I do.'

(rewritten)

One morning Little Hippo said to himself, 'I don't want anyone to bring me food.' 'I don't want anyone to take care of me.'7

In the rewritten version, *said to himself* has been substituted for *felt cross and grumbled, food* for *lily pads and corn*, and *take care of me* for *watch everything I do.* Although it contains fewer uncommon words, the rewritten passage is vague and no longer communicates the idea in the original that Little Hippo wants privacy and something different for breakfast. For no apparent reason, little Hippo now rejects food and care in general.

These contrasting passages illustrate that reducing sentence length and changing word familiarity does not necessarily produce more comprehensible text. They also illustrate that the verve and style of an original can be lost in translation.

In summary, readability formulas are useful as a first check on the difficulty and appropriateness of books. However, no formula gauges the clarity, coherence, organization, interest, literary quality, or subject matter adequacy of books. Inevitably, overreliance on readability formulas by the schools and their misuse by the publishing industry has contributed to bad writing in schoolbooks. The Commission urges those who buy books and those who write and edit them to supplement analyses using readability formulas with analyses of the deeper factors that are essential for quality.

The Transition to Literature, Social Studies, and Science

Formal reading instruction begins with very simple stories. Eventually the young reader must develop the skill to understand literature and subject matter textbooks. This transition can be made easier through careful selection of material, coherent writing, and sound editing.

There are good reasons why reading instruction begins with simple stories. One is the need to control vocabulary. A deeper and more subtle reason is that children readily acquire an understanding of the whole structure of stories and, therefore, stories are especially comprehensible to children.

As this paragraph is written, the raccoon's motivation for hiding may not be clear, and the animal's action may seem arbitrary. If the last sentence is changed to, "Beause wild animals are afraid of people, the raccoon hid in back of a tree." the paragraph becomes easier for a child to understand.[13]

Obviously, as students advance they will have to learn to cope with texts in which both the structure and content are unfamiliar. Somewhat different demands are imposed by the two major types of texts the maturing reader faces - literature and subject matter textbooks.

With respect to literature, students must be able to understand increasingly complicated plots and characterization. They need to be able to cope with literature in which devices such as flashbacks and flash-forwards are frequent and subtle in realization. They need to be able to appreciate the moral or author's point as well as how the plot is resolved. Particularly in the early grades, made-for-school stories are not as complex as the literature intended for children in the same grades on the shelves of libraries and bookstores.[14] This fact has caused some authorities to wonder whether school reading programs adequately prepare children for genuine literature.

Subject matter textbooks pose the biggest challenge for young readers being weaned from a diet of simple stories.[15] Most selections in basal readers for the primary grades are stories. It is only common sense that children would be helped to make the transition to textbooks if early basal readers contained more high quality non-fiction. Though there is little hard evidence on the point, anyone experienced in working with young readers knows that they can understand and do appreciate selections on such topics as animals, clouds, and how to make a kite, provided the material is presented in a coherent fashion.

Compared to simple stories, the intrinsic structure in a field such as geography does less to guide an author's organization of a text and, later, the student's reading of the text. In other words, the author of a textbook chapter has many more options about which topics to include and the order in which they are addressed than the author of a simple story. For instance, while there is an underlying structure to geography, it does not dictate that the political boundaries, topography, climate, culture, economy, history, and government of a country must all be discussed. It does not dictate the order in which topics are addressed. It does not dictate which of the possible connections between climate and economy or culture and government must be drawn.

Story "structure" refers to the way in which ideas in a story are connected. Well-formed children's stories place characters in settings. The characters have goals that are expressly stated or easily inferable. The characters make plans and undertake actions to achieve those goals. The actions unfold in an orderly sequence. There are outcomes in a well-formed story. Sometimes the characters fail and sometimes they succeed in reaching their goals, but in any case they have emotional reactions to these outcomes.

Research has shown that most children's sense of the structure of stories develops rapidly.[8] By the time children who have *heard* a lot of stories enter elementary school, they have a surprisingly sophisticated understanding of story structure. They know about characters, plot, action, and resolution. How does a knowledge of story structure make it easier for children to understand the stories in their readers? Research with young children reveals that the more closely a story fits an expected structure, the easier it is for a reader to grasp and remember the important ideas.[9] Stories that conform to a "good" story structure make it easier for readers to connect the parts of the story.

Regrettably, many stories for the early grades do not have a predictable structure.[10] This is especially true of the stories in primers and first-grade basal readers. In fact many of these selections do not actually tell a story, as was illustrated in the chapter on Emerging Literacy. This makes the selections less comprehensible, less interesting, and probably slows progress in learning to read.

Later selections generally do tell a story, but they often fail to have a structure that is as clear and comprehensible as possible. A pervasive fault is that stories written or edited for use in the primary grades do not give enough insight into characters' goals, problems, motives, plans, and feelings.[11] This can make the plot difficult to figure out. The following paragraph about a raccoon is from a second-grade story:

> Because he (the raccoon) was still hungry, he started to look for something more to eat. Just as he started to look, he heard something coming down the road. Two men came along on their horses. The raccoon hid in back of a tree.[12]

Thus, if a textbook is to be easy to learn from, it must contain signals so that the reader can figure out the organization the author has used. Signaling can be provided by words or phrases that give clues to the structure; for example, the phrases *in contrast* and *on the other hand*. Previews or introductory statements, headings, and summary statements can also provide signals to the reader. Evidence is accumulating that confirms and extends the common sense conclusion that to be effective textbooks must be well-organized.[16]

Above all, textbooks must try to lay bare the fundamental structures of history, geography, health, and science - and in a manner that permits children and youth to grasp the structures.[17] A key to accomplishing this is building on the knowledge students already possess. For instance, a somewhat more abstract version of the structure of simple stories can be harnessed to yield one level of understanding of history.

Throughout history, people have had goals or faced problems, they have developed plans to reach the goals or solve the problems, they have acted on the basis of the plans, and their actions have resulted in outcomes. Though history has its individual "characters," more often than in a simple story the agent in an historical episode is an institution, government, or group of people. Whereas a child reading a story will immediately apprehend the motive of hungry boys ransacking a kitchen in search of the cookiejar, the same child reading about the Westward movement in this country may find the motives of the pioneers more obscure. Still, there is a parallel between the structure of stories and the structure of historical episodes that can be exploited.

Scholars who have examined subject matter textbooks often have failed to discover a logical structure.[18] Sections of many textbooks consist of little more than lists of facts loosely related to a theme. Abrupt, unmotivated transitions are frequent. Textbooks are as likely to emphasize a trivial detail or a colorful anecdote as a fundamental principle.

For instance, in the section of a middle-grade history textbook about the building of the transcontinental railroad, one quarter of the words are used to recount the tale of Governor Leland Stanford who in Promontory, Utah, on May 10, 1869, swung a sledge hammer at a golden spike and missed.[19] A close analysis of the sections from several textbooks on the building of the transcontinental railroad revealed that none of them explained clearly why people in this country wanted to build the railroad, what the plans were for accomplishing the task, or what happened as a consequence of this monumental project.[20] Every textbook went into considerable detail about the actions of the railroad construction crews, but these actions were not linked to goals, plans, and outcomes.

When textbooks make clear the connections between motive and action, form and function, or cause and effect, students understand better. One of a growing body of studies that supports this conclusion dealt with textbook material on the workings of the human circulatory system.[21] The first two paragraphs below are excerpted from a junior high school science textbook. The second two paragraphs are excerpted from a version of the material rewritten to make explicit the connections between the structure and function of each of the major parts of the circulatory system.

> (original)
>
> A human heart is a cone-shaped, muscular organ about the size of a large fist. The heart is located in the center of the chest behind the breastbone and between the lungs.
>
> A human heart contains four chambers *-right atrium (AY tree uhm), left atrium, right ventricle (VEN rih kuhl),* and *left ventricle.* Right and left refer to the body's right and left sides. A wall separates the chambers on the right from the chambers on the left.
>
> (rewritten)
>
> The heart is the part of the circulatory system that pumps blood throughout the body. The heart is located in the center of the chest behind the breastbone and between the lungs. The human heart is suited for pumping because it is a hollow, cone-shaped, muscular organ about the size of a large fist. Being hollow, the heart can easily fill up with blood. Once filled, the heart muscle provides the power necessary for pumping the blood through the body.
>
> A human heart contains four hollow chambers made for receiving and sending blood. The*right atrium* (AY tree uhm), and *right ventricle* (VEN truh kuhl) receive and send blood to the lungs, while the *left atrium, and left ventricle* receive and send

> blood to the rest of the body. (Note that right and left refer to your body's right-hand and left-hand sides.) The right and left sides of the heart are separated by a wall of muscle. This wall keeps blood going to the lungs separate from the blood going to the body.[22]

In a study involving several hundred eighth graders, students who studied the rewritten material learned more about the concepts required to understand the circulatory system than students who studied the original version.[23] Though the excerpt above from the rewritten version is much longer than the related excerpt from the original, the two versions were the same length when considered as a whole. The rewritten version was kept the same length by deleting what was judged to be extraneous information, such as the fact that, "The work done by the heart each minute is about equal to lifting 32 kg a distance of 30 cm off the ground."

In conclusion, many discussions of what may be wrong with textbooks, and what ought to be done to make them right, miss the mark. Pleas to control the "readability" of textbooks often confuse symptoms with causes. Pleas for high quality writing are vague. "Stylish" writing is not always comprehensible writing. Pleas to make textbooks "harder" are not on the mark either. While students do make faster progress when texts offer some challenge, people prove every day that it is possible to make unimportant information hard to understand. Surely, the goal is to write meaty texts, rich with important concepts and information, that at the same time are easy enough to understand.

To put the conclusion in a nutshell, school books should contain *adequate explanations* considering the skill level, knowledge, and reasoning power of the developing reader. What will be an adequate explanation depends upon the grade. In the case of a second-grade story, it may mean explaining why a raccoon is hiding behind a tree. In the case of a fifth-grade history text, it may mean explaining why the United States wanted to build the transcontinental railroad. In the case of an eighth-grade science text, it may mean explaining how the structure of the human heart supports its function.

Teaching That Will Extend Literacy

Textbook writers can make the process of extracting and integrating relevant information from stories and textbooks much easier for school children. However, well-written materials will not do the job alone. Teachers must instruct students in strategies for extracting and organizing critical information from text. This function of the teacher is all the more important since many textbooks are inadequate. Thus, whether children will make rapid or slow progress in becoming skilled readers depends upon the content and method of instruction.

Research has shown that children's learning is facilitated when critical concepts or skills are directly taught by the teacher.[24] The section on phonics in the preceding chapter concluded that breaking the code is easier for children when instruction directly provides information about letter-sound relationships. Similarly, comprehending information in textbooks is easier if students are instructed in strategies that cause them to focus their attention on the relevant information, synthesize the information, and integrate it with what they already know. Children should not be left guessing about how to comprehend. In the words of one researcher, "thinking needs to be made public."[25]

Direct instruction needs to be distinguished from questioning, discussion, and guided practice.[26] Direct instruction in comprehension means explaining the steps in a thought process that gives birth to comprehension. It may mean that the teacher models a strategy by thinking aloud about how he or she is going about understanding a passage. The instruction includes information on why and when to use the strategy. Instruction of this type is the surest means of developing the strategic processing that was identified earlier as characteristic of skilled readers.

In one study of direct comprehension instruction, seventh graders who could identify words adequately but displayed poor comprehension were taught four specific strategies to help them monitor their understanding and learning of textbook selections - devising questions about the text, summarizing, predicting what the author was going to say next, and resolving inconsistencies.[27] These strategies were taught by a technique called "reciprocal teaching" in which teacher and children worked together in small groups. First, the teacher gave direct instruction in the four strategies and modeled how to use them - for instance, by thinking aloud about how to formulate an important question about the text and talking about what she found unclear or confusing. Then, each of the students took on the role of the teacher, and asked the rest of the group a question and identified confusing aspects of the text, with the 'real' teacher giving guidance. After several weeks all students improved in answering comprehension questions. They also carried over these new strategies to other academic subjects. When the students were tested two months later, they were still using the strategies.

In another project, third- and fifth-grade children were taught how to use such strategies as skimming, *why* the strategies were helpful, and *when* to use them.[28] Bulletin boards, worksheets, and direct instruction from teachers reinforced the importance of the strategies, along with such metaphors as 'Be a Reading Detective' and 'Road Signs for Reading'. After four months of instruction, a number of different measures revealed significant improvements in students' reading.

The most logical place for instruction in most reading and thinking strategies is in social studies and science rather than in separate lessons about reading. The reason is that the strategies are useful mainly when the student is grappling with important but unfamiliar content. Outlining and summarizing, for instance, make sense only when there is some substantial material to be outlined or summarized. The idea that reading instruction and subject matter instruction should be integrated is an old one in education, but there is little indication that such integration occurs often in practice.

Indeed, it is a surprising fact, but one documented by studies in Canada as well as the United States, that direct comprehension instruction that goes beyond the meanings of individual words is rare any place in the curriculum in ordinary classrooms.[29] In one well-known study, only 45 minutes of comprehension instruction, not counting time spent asking and answering questions, were found during 17,997 minutes of observation in reading and social studies periods in 39 classrooms in 14 school districts.[30]

Why don't more teachers provide direct instruction in reading strategies? According to experts who have analyzed the teachers' manuals accompanying reading, social studies, and science programs, the advice they contain often is too sketchy to be of much help to a teacher who wants to directly teach some aspect of comprehension such as how to formulate the main idea of a passage.[31]

A manual isn't necessary for a teacher to teach in a fashion that "makes thinking public." However, the expectation that teachers can instruct students in these strategies without good manuals assumes that teachers have been trained to provide such instruction. Since most of the research underlying these strategies is relatively recent, this assumption is unrealistic. Just as students need instruction in knowing what, when, why, and how to think strategically when reading textbooks, teachers need to be trained in knowing what, when, why, and how to teach comprehension strategies directly.

Practice Appropriate for Extending Literacy

In this section, the important topic of independent practice of reading will be considered. "Independent" means that the student is expected to work alone with a minimum amount of supervision or help from the teacher or others. There are two aspects to independent practice. The first is practice that is intended to strengthen specific skills or concepts. This function is mainly served by workbooks and skill sheets in today's schools. The second is practice that is intended to reinforce the whole act of reading. The major activity that does this is extended silent reading. Also important are extended opportunities for speaking, listening, and, particularly, writing.

Workbooks and Skill Sheets

Students spend up to 70% of the time allocated for reading instruction in independent practice, or "seat-work."[32] This is an hour per day in the average classroom. Most of this time is spent on workbooks and skill sheets. Children spend considerably more time with their workbooks than they do receiving instruction from their teachers.

Publishers say that the demand for seatwork activities is insatiable. To meet the demand, most publishers supply a range of supplementary exercise sheets in addition to workbooks which relate to the basal reading lessons. Many teachers use the exercises of several publishers as well as ones they have prepared themselves. In the course of a school year, it would not be uncommon for a child in the elementary grades to bring home 1,000 workbook pages and skill sheets completed during reading period.

Analyses of workbook activities reveal that many require only a perfunctory level of reading.[33] Children rarely need to draw conclusions or reason on a high level. Few activities foster fluency, or constructive and strategic reading. Almost none require any extended writing. Instead, responses usually involve filling a word in a blank, circling or underlining an item, or selecting one of several choices. Many workbook exercises drill students on skills that have little value in learning to read. The exercises sometimes have difficult-to-understand directions and confusing art work. A serious problem is that some workbook pages and many skill sheets are poorly integrated with the rest of the reading lesson.

Consider, for example, the following exercise from a second-grade workbook:

> Read each sentence. Decide which consonant letter is used the most.
> Underline it each time.
> 1. My most important toy is a toy train.
> 2. Nancy, who lives in the next house, has nine cats.
> 3. Will you bring your box of marbles to the party?

It is peculiar to suppose that, if children can already read the sentences, their reading ability will be improved by asking them to underline consonants. Furthermore, though the children are directed to "read each sentence," they don't need to read anything but the directions to do the task. The one certain conclusion is that the exercise is time-consuming and extremely tedious.

Even young children often see the futility of doing workbook page after workbook page. One researcher asked children what they were doing when they were occupied with workbooks.[35] Most saw the pages merely as something to get finished. As one boy, age 6, said, "There! I didn't understand that, but I got it done". Students frequently don't read all the material in worksheets. Instead, they attempt to use shortcuts that allow them to answer in a mechanical fashion. If options a and c have been used to answer two of three questions, for example, some children will write down *b* for the third question without reading it.

Classroom research suggests that the amount of time devoted to worksheets is unrelated to year-to-year gains in reading proficiency.[36] Why, then, does this type of seatwork take the largest share of all the time devoted to reading? In the primary grades, the major reason appears to stem from the fact that children are taught reading in small groups. Maintaining the undivided attention of the children in one group is difficult to manage unless the rest of the children are occupied with tasks they can do by themselves that are sure to keep them busy. A contributing reason is the widespread practice of school-mandated tests covering small bits of knowledge about reading. As will be detailed in the chapter on testing, holding teachers responsible for children's performance on these tests reinforces heavy use of seatwork exercises.

In summary, while it cannot be doubted that well-designed workbooks and skill sheets can provide worth-while practice in aspects of reading, many of these exercise activities are poorly designed. The most notable shortcomings are the dubious value of a large share of the activities to growth in reading proficiency and the lack of integration of the activities with the rest of the reading lesson. For these problems, the publishing industry is responsible. Moreover, in the all too typical classroom, too much of the precious time available for reading instruction is given over to workbook and skill sheet tasks and students invest only the most perfunctory level of attention in the tasks. For these problems, teachers and school administrators are responsible. The conclusion is that workbook and skill sheet tasks should be pared to the minimum that will actually contribute to growth in reading.

Independent Reading

Research suggests that the amount of independent, silent reading children do in school is significantly related to gains in reading achievement.[37] However, the amount of time children spend reading in the average classroom is small. An estimate of silent reading time in the typical primary school class is 7 or 8 minutes per day, or less than 10% of the total time devoted to reading. By the middle grades, silent reading time may average 15 minutes per school day.[38]

Research also shows that the amount of reading students do out of school is consistently related to gains in reading achievement.[39] In one recent study, fifth graders completed a daily log of after-school activities for periods ranging from two to six months.[40] Among all the ways the children reported spending their leisure time, average minutes per day reading books was the best predictor of reading comprehension, vocabulary size, and gains in reading achievement between the second and the fifth grade.

But most children don't read very much during their free time. In the study of fifth graders mentioned above, 50% of the children read books for an average of four minutes per day or less, 30% read two minutes per day or less, and fully 10% never reported reading any book on any day. For the majority of the children, reading from books occupied 1% of their free time, or less. In contrast, the children averaged 130 minutes per day watching TV, or about one third of the time between the end of school and going to sleep."

Increasing the amount of time children read ought to be a priority for both parents and teachers. Reading books (and magazines, newspapers, and even comic books) is probably a major source of knowledge about sentence structure, text structure, literary forms, and topics ranging from the Bible to current events.

Independent reading is probably a major source of vocabulary growth. A synthesis of available evidence suggests that children in grades three through twelve learn the meanings of about 3,000 new words a year.[42] Some of these are directly taught in school, but a moment's reflection will show that this source could account for only a modest proportion of the total. To learn 3,000 words a year would require learning about 15 words every school day. Even the most determined advocates of vocabulary drill do not introduce this many words a day, let alone teach them to the level of mastery. One group of researchers has argued that, beyond the third grade, children acquire the majority of the new words they learn incidentally while reading books and other material."

Independent reading is probably a major source of reading fluency. In contrast to workbook pages or computer drills, the reading of books provides practice in the whole act of reading. Practice in this form is likely to be particularly effective in increasing the automaticity of word identification skills. Avid readers do twenty times or more as much independent reading as less frequent readers.[44] This means they are getting vastly more practice and helps to explain why children who read a lot make more progress in reading. Children who are avid readers come from homes in which reading is encouraged by a parent, grandparent, older brother or sister or even a baby sitter. They come from homes that have books, subscriptions to children's magazines, and in which both adults and children have library cards.[45] Public and school libraries are especially important for children from poor homes. One study found that the amount of reading children from poor homes did and their gains in reading achievement over the summer were related to the distance they lived from a public library.[46]

Analyses of schools that have been successful in promoting independent reading suggest that one of the keys is ready access to books. However, fully 15% percent of the nation's schools do not have libraries. In most of the remaining schools, the collections are small, averaging just over 13 volumes per student. In 1978, schools that did have libraries were adding less than a book a year per student, which does not even keep up with loss and wear.[47] According to a 1984 evaluation, "the collections of the school library ... are in increasing jeopardy; inventories have been shrinking, and what remains is bordering on the obsolete."[48]

In addition to school-wide libraries, several projects have demonstrated the value of classroom libraries. Children in classrooms with libraries read more, express better attitudes toward reading, and make greater gains in reading comprehension than children who do not have such ready access to books.'[49] In one study with non-native English speakers, ample classroom libraries were associated with dramatic improvements in reading achievement that were still evident when the children were retested a few years later."[50]

Other features of school programs that are associated with increased independent reading include activities to interest children in books, guidance in choosing books from someone who knows both the books and the children, and time set aside during the school day for independent reading. Research suggests that the frequency with which students read in and out of school depends upon the priority classroom teachers give to independent reading.[51]

The Connection Between Reading and Writing

It cannot be emphasized too strongly that reading is one of the language arts. All of the uses of language - listening, speaking, reading, and writing - are interrelated and mutually supportive. It follows, therefore, that school activities that foster one of the language arts inevitably will benefit the others as well.

Writing activities, in particular, should be integrated into the reading period. Students can do extended writing in place of some of the workbook pages that now occupy so much of their time. Students can write about the material they have just read about in their basal readers. Or they can write about other topics. In either case, writing is seatwork that affects children's reading in positive ways.

Opportunities to write have been found to contribute to knowledge of how written and oral language are related, and to growth in phonics, spelling, vocabulary development, and reading comprehension.[52] Students who write frequently and discuss their writing with others approach reading with what has been termed the "eye of a writer." The following quotation illustrates the change in understanding of one young author:

> Before i ever wrote a book, I used to think there was a big machine, and they typed a title and then the machine went until the book was done. Now I look at a book and I know a guy wrote it and it's been his project for a long time. After the guy writes it, he probably thinks of questions people will ask him and revises it like I do.[53]

The value for reading is one reason for increased writing. Of course, the principal reason is that learning to write well is a valued goal in its own right. Unfortunately, every recent analysis of writing instruction in American classrooms has reached the same conclusion: Children don't get many opportunities to write. In one recent study in grades one, three and five, only 15% of the school day was spent in any kind of writing activity.[54] Two-thirds of the writing that did occur was word for word copying in workbooks. Compositions of a paragraph or more in length are infrequent even at the high school level.[55]

As was discussed in the chapter on Emerging Literacy, writing can be included in the earliest stages of reading instruction. Young children can write with preformed letters or print labels on pictures. Later, as children gain more control over the physical act of writing, writing ought to become even more integral to reading instruction.

Instruction in grammar is often justified on the grounds that it improves students' writing. In the long run, knowledge of grammar undoubtedly helps people become better writers as well as as better readers and better speakers. However, it is a mistake to suppose that instruction in grammar transfers readily to the actual uses of language. This may be the explanation for the fact that experiments over the last fifty years have shown negligible improvement in the quality of student writing as a result of grammar instruction.[56] Research suggests that the finer points of writing, such as punctuation and subject-verb agreement, may be learned best while students are engaged in extended writing that has the purpose of communicating a message to an audience.[57] Notice that no communicative purpose is served when children are asked to identify on a worksheet the parts of speech or the proper use of *shall* and *will.*

Skillful teachers find ways to give children reasons to communicate to real audiences. Children can retell stories that they have read in the form of a news release for classmates. They can write to maintain classroom life by writing announcements, schedules for class activities, diaries of classroom events, records of the weather, and acknowledgments of assistance from school personnel, a parent, or a classroom visitor. Letter writing, in particular, is a form of expression in which there are reasons to write to real audiences.

List writing is an easy way to initiate children into writing. For example, children might read to locate a recipe for cookies to be served at a class party. Once the recipe has been located, newspapers can be studied to determine the best source for ingredients. This could be followed by writing the shopping list of ingredients and directions for making the cookies for the class party.

Another form of writing that has been tried successfully in classrooms is keeping diaries or journals. Some teachers engage in give-and-take with students by periodically writing comments in their joumals.[58] These teachers emphasize the content of the children's entries, and are sparing of suggestions about spelling, grammar, or handwriting.

In summary:

o Readability formulas are useful only as a rough check on the difficulty and appropriateness of books.
It is also important to gauge clarity, organization, interest, literary quality, and subject matter accuracy.

o School textbooks should be rich with important concepts and information. Books for all grades need to contain adequate explanations taking into account the skill level, knowledge, and reasoning power of the reader.

o Teachers need to teach comprehension strategies directly. Teachers should devote more time to teaching strategies for understanding not only stories but also social studies and science texts.

o Workbook and skill sheet tasks take too much of the time allotted for reading. These should be pared to the minimum that will actually contribute to growth in reading.

o Students should do more extended writing. Writing is most beneficial when students have a reason to communicate to a genuine audience.

o Priority should be given to independent reading. Two hours a week of independent reading should be expected by the time children are in the third or fourth grade. To do this, children need ready access to books and guidance in choosing appropriate and interesting books. Reading should emphasize works that represent the core of our cultural heritage.

The Teacher and the Classroom

An indisputable conclusion of research is that the quality of teaching makes a considerable difference in children's learning. Studies indicate that about 15 percent of the variation among children in reading achievement at the end of the school year is attributable to factors that relate to the skill and effectiveness of the teacher.[1] In contrast, the largest study ever done comparing approaches to beginning reading found that about 3 percent of the variation in reading achievement at the end of the first grade was attributable to the overall approach of the program.[2] Thus, the prudent assumption for educational policy is that, while there may be some "materials-proof" teachers, there are no "teacher-proof" materials.

Teachers influence children's learning in a number of ways that materials alone cannot. The teacher's critical role in providing direct instruction was discussed in previous chapters. In addition, teachers influence children's learning in the following ways: Managing the classroom environment, pacing and content coverage, and grouping children for instruction.

Management of the Classroom Environment

Teachers who are successful in creating *literate environments* have classrooms that are simultaneously stimulating and disciplined. The successful teacher creates varied opportunities for language use. The successful teacher asks questions that make children think and requires children to answer in ways that communicate ideas clearly. The successful teacher uses language in a manner that sparks children's interest in the meanings and origins of words. In the classrooms of successful teachers, the children are encouraged to ask questions and present information about class experiences, current world events, television programs, and so on. In classrooms that foster enthusiasm for language, the children write a lot and do so for many reasons.

Though writing, speaking, and listening are all important, children must receive reading instruction and have opportunities for reading to become good readers. Research has substantiated that the amount of time that teachers allocate to reading relates to year-to-year gains in reading proficiency, as represented by standardized tests.[3] In the typical American classroom, a great deal of time is allocated to reading instruction. The best available evidence shows that the average is about an hour and a half per day.[4] Depending on the locale, the school day is about five hours in length.

Thus, about 30% of the school day in the average classroom is spent in reading instruction. However, it should be reiterated again that much of this time is devoted to workbook pages and skill sheets that have doubtful value in learning to read.

Furthermore, average figures obscure the extremes. The amount of time allocated to reading varies enormously from one classroom to another, even within the same school. Teachers have been observed who allocated as few as 35 minutes per day or as much as 126 minutes per day to reading.[5] At the low end of this range, there is reason to worry that children will not have enough time to make satisfactory progress in reading.

The time allocated to reading may or may not be used efficiently. Thus, more important than time allocated to reading is "engaged time" - the time the child is productively involved in reading.[6] The total amount of engaged time depends on allocated time, of course, and also on the skill of the teacher in managing the class.

Skilled teachers minimize discipline problems, and quickly handle the ones that do arise. At the beginning of the school year, skilled teachers establish routines for potentially time-wasting chores such as making transitions between activities, distributing supplies, getting help with assignments, and turning in completed work. When necessary, they provide instruction in carrying out these routines, and continue to remind students to use the routines until they do so from habit.[7]

Skilled teachers attempt to make clear the purpose of every activity. They make sure children understand how to do each task. They make sure children know what they are supposed to do when they finish a task. In classrooms taught by these teachers, more of the precious time available for learning is spent in activities with academic value.[8]

Effective teachers place a premium on subject matter learning, but they are not indifferent to children as individuals. They are supportive while at the same time maintaining high expectations for learning. One characteristic that distinguishes effective classrooms from ineffective ones is the teacher's commitment to the belief that all children can learn to read. Effective teachers strive to see that every child masters basic skills and then goes as far beyond this basic level as possible.[9]

Pacing and Content Coverage

The pace of instruction strongly predicts year-to-year gains in reading.[10] Children of any given level of ability who are in fast-paced groups show growth beyond the expected. Striking variation is evident across classrooms in the pace at which children move through material. A recent study reported data on the pace of instruction in 60 elementary school classrooms from seven different states.[11] On the average, the high-ability groups in these classrooms covered considerably more running words of text per week than the low-ability groups. The figures were 1,100 words as compared to 400 in high- and low-ability first-grade groups and 6,900 as compared to 4,400 in high- and low-ability fifth-grade groups. While some differences across grade and ability level are to be expected, the pace of instruction varied by a factor of ten or even twenty within groups at the same grade and supposedly at the same level of ability. For instance, the number of words read per week was reported to have varied from 600 to 8,900 in low-ability, fifth-grade groups.

Of course, the pace of instruction cannot be pushed beyond some limit. In the long run, the pace that can be maintained with a group depends not only on the ability of the children, but on the difficulty of the material, the time allocated to reading, and the percentage of allocated time during which the children remain actively engaged. A time-honored rule is that the pace is optimum when children accurately identify 95% or more of the words in a text while reading aloud. Another rule proposes that children ought to answer about 80% of the teacher's questions satisfactorily. If the level of success falls below these figures, the belief is that the pace is too brisk and the lessons are in danger of floundering. Available evidence does suggest that high levels of success are associated with large year-to-year gains in reading.[12]

Thus, though effective teachers move through material at a brisk pace, they do not sacrifice comprehension. They move in small steps and they move on to the next step only when students have been successful. How the most effective teachers manage to maintain both a fast pace and a high rate of success, two characteristics that may sometimes conflict, is a complex issue that research has not yet completely untangled.

One obstacle to an optimum pace is the meager ration of books with which many classrooms are stocked. There are reports of teachers who slow down when they see that they are running out of material. They may stop reading instruction altogether when they finish the assigned book, since they are not allowed to encroach on next year's book, and either other books are unavailable or the teacher does not perceive that it is important to keep the children reading.

Another obstacle to an optimum pace in some schools is the principal who insists that every child reach certain points in the reading curriculum on specified dates. The result can be that some students are rushed over material without mastering anything while other students mark time.

Grouping for Instruction

When children receive reading instruction in the United States, it usually takes place in a lesson with a small group of children of similar ability. Virtually all primary-grade teachers and many middle-grade teachers divide the children in a class into groups, most often three groups of high-, average-, and low-ability. Reading groups are kept small to make it easier for the teacher to maintain the active engagement of the children. Reading groups are composed on the basis of ability to enable the teacher to adapt the pace of instruction to the children; otherwise, the fast child may be held back or the slow child may be left behind.

In theory, ability grouping allows teachers to pace instruction at a more-nearly-optimum rate for children at every level than would be possible in whole class teaching. In fact, the evidence suggests that ability grouping may improve the achievement of the fast child but not the slow child.[13]

Whatever cute name may be given to a reading group, the children know their place. They evaluate their own abilities on the basis of the status of their group. The low-group students in one school may be at the same reading level as the students in the average group in another school. Yet, the low-group students in the one school may view themselves as poor readers, and their teachers may have lower expectations for their progress.[14]

There are qualitative differences in the experience of children in high and low reading groups that would be expected to place children in low groups at a disadvantage.[15] Children in low groups do relatively more reading aloud and relatively less silent reading. They more often read words without a meaningful context on lists or flash cards, and less often read words in stories. Teachers correct a higher proportion of the oral reading mistakes of children in low groups than children in high groups. When a mistake is corrected, teachers are more likely to furnish a clue about pronunciation and less likely to furnish a clue about meaning for children in low groups. Teachers ask relatively more simple, factual questions of children in low groups and relatively fewer questions that require reasoning.

Characteristically, low groups are less engaged with the lesson than high groups.[16] One reason for this is that low groups include children who are low in "social maturity" - that is, children perceived as troublemakers and those who won't pay attention - as well as children who are low in ability. In high groups, the children themselves sometimes police misbehavior and may coach others to pay attention. In low groups, children may distract one another. Moreover, teachers tolerate more interruptions of the lessons of low than high groups.[17]

It is difficult for a child to move from one group to another within a year.[18] Since teachers form the groups at the beginning of the year partly on the basis of the children's standing the previous year, changing groups from one year to the next is also difficult. It is a sad fact but frequently true that, "Once a bluebird, always a bluebird."

Yet the means for assessing reading ability, particularly the ability of children in kindergarten or first grade, are quite fallible. Grouping decisions, therefore, are also fallible. Some scholars have argued that it is not so much ability that determines the future attainment of a young child, but the reading group into which the child is initially placed.[19] As has been detailed already, the child in a group designated as low-ability will receive less instruction and qualitatively different instruction than the child would in a group designated as high-ability. As a result, the child may make slow progress in reading and the initial group designation may become a self-fulfilling prophecy.

A common belief among teachers is that all children require an equal share of their attention. Though children of all levels require direct instruction from teachers, low-ability children usually do less well than high-ability children when working alone or in small groups without the teacher.[20] In other words, close teacher supervision is particularly important for less able students. Thus, it seems advisable for teachers to assign fewer students to low groups and to keep closer track of these students during independent work periods.

The problems with ability grouping can be alleviated if not eliminated entirely. First, the assignment of children to groups should be reviewed periodically and children switched around, even though this means that some children will not have read all of the previous selections in the book. Second, reading groups do not always have to be formed on the basis of ability. For example, the advantage of small group instruction for holding attention would still be there if children were sometimes grouped on the basis of interest in the topic. Grouping according to interest is feasible, since children usually read at a higher level than may be typical for them when they find the topic particularly interesting.[21] Some reading teachers encourage children to sit in on the lessons of other groups, and report that the "visitors" profit from the experience; this is an idea that other teachers might wish to try. Most important, teachers must take care to provide rich lessons for each group of children, whatever their level.

Because of the serious problems inherent in ability grouping, the Commission believes that educators should explore other options for reading instruction. One option is more use of whole class instruction. This seems feasible for aspects of phonics, spelling, study skills, and comprehension. There are programs that recommend whole class teaching some of the time,[22] and they achieve good results, but whether the results are attributable to the use of whole class instruction or other features of the programs is not known.

Another possible supplement to the conventional arrangement of teacher-led instruction of children grouped according to ability is an arrangement in which children tutor each other, alternating in the role of teacher. "Peer tutoring" has proved successful in arithmetic, and it deserves exploration and study in reading as well.[23]

In conclusion:

- Effective teachers create literate environments for their children. They schedule reading and writing activities as a priority, move through materials at an appropriate pace, stimulate and sustain children's attention, and arrange for high rates of success.
- Grouping by ability may slow the progress of low-ability students. Both the quantity and quality of instruction for low groups need improvement. Some of the problems with ability grouping can be alleviated by switching group assignments periodically, using criteria other than ability for group assignment, and, maybe, increasing the time devoted to whole class instruction.

What Is Reading?

1. Adapted from Schallert, D. L. (1982). The significance of knowledge: A synthesis of research related to schema theory. In W. Otto & S. White (Eds.), *Reading expository material* (pp. 13-48). New York: Academic Press, p. 28.
2. Pearson, P. D., & Spiro, R. J. (1980). Toward a theory of reading comprehension instruction. *Topics in Language Disorders, 1,* 71-88.
3. Oral reading errors showing an overreliance on graphophonemic cues are described in:

   Hood, J., & Kendall, J. R. (1975). Qualitative analysis of oral reading errors of reflective and impulsive second graders: Follow-up study. *Journal of Reading Behavior, 7,* 269-281.

   Weber, R. M. (1970). A linguistic analysis of first-grade reading errors. *Reading Research Quarterly, 5,* 427-451.
4. Oral reading errors showing an overreliance on contextual cues are described in Biemiller, A. (1970). The development of the use of graphic and contextual information as children learn to read. *Reading Research Quarterly, 6,* 75-96.
5. Steffensen, M. S., Joag-dev, C., & Anderson, R. C. (1979). A cross-cultural perspective on reading comprehension. *Reading Research Quarterly, 15,* 10-29.
6. Pearson, P. D., Hansen, J., & Gordon, C. (1979). The effect of background knowledge on young children's comprehension of explicit and implicit information. *Journal of Reading Behavior, 11,* 201-209.
7. Owings, R. A., Peterson, G. A., Bransford, J. D., Morris, C. D., & Stein, B. S. (1980). Spontaneous monitoring and regulation of learning: A comparison of successful and less successful fifth graders. *Journal of Educational Psychology, 72,* 250-256.

   Paris, S. G., & Lindauer, B. K. (1976). The role of inference in children's comprehension and memory for sentences. *Cognitive Psychology, 8,* 217-227.

   For implications of children's failure to draw on prior knowledge in the school setting, see:

   Beck, I. L. (1985). Five problems with children's comprehension in the primary grades. In J. Osborn, P. T. Wilson, & R. C. Anderson (Eds.), *Reading education: Foundations for a literate America* (pp. 239-253). Lexington, MA: Lexington Books.

   Wilson, P. T., & Anderson, R. C. (1985). Reading comprehension and school learning. In J. Osborn, P. T. Wilson, & R. C. Anderson (Eds.), *Reading education: Foundations for a literate America* (pp. 319-328). Lexington, MA: Lexington Books.
8. Lesgold, A., Resnick, L. B., & Hammond, K. (1985). Learning to read: A longitudinal study of word skill development in two curricula. In T. G. Waller & G. E. MacKinnon (Eds.), *Reading research: Advances in theory and practice* (Vol. 4, pp. 107-138). New York: Academic Press.
9. Cattell, J. M. (1886). The time it takes to see and name objects. *Mind, 11,* 63-65.
10. Meyer, D. E., & Schvaneveldt, R. W. (1971). Facilitation in recognizing pairs of words: Evidence of a dependence between retrieval operations. *Journal of Experimental Psychology, 90,* 227-234. This study shows facilitation effects with words presented in isolation. There is evidence to suggest that contextual constraints also facilitate processing during reading of connected text. See Zola, D. (1984). Redundancy and word perception during reading. *Perception and Psychophysics, 36,* 277-284.
11. McClelland, J. L., & Rumelhart, D. E. (1981). An interactive activation model of context effects in letter perception: Part 1. An account of basic findings. *Psychological Review, 88,* 375-407.

    Rumelhart, D. E., & McClelland, J. L. (1982). An interactive activation model of context effects in letter perception: Part 2. The contextual enhancement effect and some tests and extensions of the model. *Psychological Review, 89,* 60-94.
12. Gough, P. B. (1972). One second of reading.

In J. F. Kavanagh & I. G. Mattingly (Eds.), *Language by ear and by eye* (pp. 331-358). Cambridge, MA: MIT Press.

Just, M. A., & Carpenter, P. A. (1980). A theory of reading: From eye fixations to comprehension. *Psychological Review, 87,* 329-354.

13. Stanovich, K. E. (1980). Toward an interactive-compensatory model of individual differences in the development of reading fluency. *Reading Research Quarterly, 16,* 32-71.

14. Glushko, R. J. (1979). The organization and activation of orthographic knowledge in reading aloud. *Journal of Experimental Psychology: Human Perception and Performance, 5,* 674-691.

McClelland & Rumelhart (1981) op. cit.

Rumelhart & McClelland (1982) op. cit.

15. Perfetti, C. A., & Lesgold, A. M. (1977). Discourse comprehension and sources of individual differences. In M. A. Just & P. A. Carpenter (Eds.), *Cognitive processes in comprehension* (pp. 141-183). Hillsdale, NJ: Erlbaum.

16. Anderson, R. C., & Kulhavy R. W. (1972). Learning concepts from definitions. *American Educational Research Journal, 9,* 385-390.

Anderson, R. C., Goldberg, S. R., & Hidde, J. L. (1971). Meaningful processing of sentences. *Journal of Educational Psychology, 62,* 395-399.

17. Hoffman, J. V., O'Neal, S. F., Kastler, L. A., Clements, R. O., Segel, K. W., & Nash, M. F. (1984). Guided oral reading and miscue focused verbal feedback in second-grade classrooms. *Reading Research Quarterly, 19,* 367-384.

18. Lesgold, Resnick, & Hammond (1985) op. cit.

19. See Baker, L., & Brown, A. L. (1984). Metacognitive skills and reading. In P. D. Pearson (Ed.), *Handbook of reading research* (pp. 353-394). New York: Longman.

20. Forrest, D. L., & Waller, T. G. (1979, March). *Cognitive and metacognitive aspects of reading.* Paper presented at the biennial meeting of the Society for Research in Child Development, San Francisco, CA.

21. From Grabe, M., & Mann, S. (1984). A technique for the assessment and training of comprehension monitoring skills. *Journal of Reading Behavior, 16,* 131-144, p. 136.

22. Ibid.

23. Myers, M., & Paris, S. G. (1978). Children's metacognitive knowledge about reading. *Journal of Educational Psychology, 70,* 680-690.

24. Paris, S. G., & Myers, M. (1981). Comprehension monitoring, memory, and study strategies of good and poor readers. *Journal of Reading Behavior, 13,* 5-22.

25. Durkin, D. (1982). *A study of poor black children who are successful readers* (Reading Ed. Rep. No. 33). Urbana: University of Illinois, Center for the Study of Reading.

26. See Walberg, H. J., Hare, V. C., & Pulliam, C. A. (1981). Social-psychological perceptions and reading comprehension. In J. T. Guthrie (Ed.), *Comprehension and teaching: Research reviews* (pp. 140-159). Newark, DE: International Reading Association.

27. See Dweck, C. S. (1975). The role of expectations and attributions in the alleviation of learned helplessness. *Journal of Personality and Social Psychology, 31,* 674-685.

28. Weiner, B. (1983). Some thoughts about feelings. In S. G. Paris, G. M. Olson, & H. W. Stevenson (Eds.), *Learning and motivation in the classroom* (pp. 165-178). Hillsdale, NJ: Erlbaum.

29. Hoffman et al. (1984) op. cit.

Rosenshine, B., & Stevens, R. (1984). Classroom instruction in reading. In P. D. Pearson (Ed.), *Handbook of reading research* (pp. 745-798). New York: Longman.

30. Brophy, J. E. (1983). Fostering student learning and motivation in the elementary school classroom. In S. G. Paris, G. M. Olson, & H. W. Stevenson (Eds.), *Learning and motivation in the classroom* (pp. 283-305). Hillsdale, NJ: Erlbaum.

31. See Chall, J. S. (1983). *Stages of reading development.* New York: McGraw-Hill.

Emerging Literacy

1. Heath, S. B. (1983). *Ways with words: Language, life and work in communities and classrooms.* New York: Cambridge University Press.
2. Wilson, P. T., & Anderson, R. C. (1985). Reading comprehension and school learning. In J. Osborn, P. T. Wilson, & R. C. Anderson (Eds.), *Reading education: Foundations for a literate America* (pp. 319-328). Lexington, MA: Lexington Books.
3. Olson, D. R. (1984). "See! Jumping!" Some

oral language antecedents of literacy. In H. Goelman, A. Oberg & F. Smith (Eds.), *Awakening to literacy* (pp. 185-192). Exeter, NH: Heinemann.

Snow, C. E., & Ferguson, C. A. (Eds.). (1977). *Talking to children: Language input and acquisition.* Cambridge, MA: Cambridge University Press.

4. Wells, G. (1981). *Learning through interaction: The study of language development.* New York: Cambridge University Press.

   Wells, G. (1983). Language and learning in the early years. *Early Child Development and Care, 11,* 69-77.

   Similarly, the experience of listening to, and talking about, stories provides children with the opportunity to learn the importance of attending to events removed from the immediate here and now. See Heath, S. B. (1982). What no bedtime story means: Narrative skills at home and school. *Language in Society, 11,* 49-76.

5. Wells, G. (1981). Some antecedents of early educational attainment. *British Journal of Sociology of Education, 2,* 181-200.

6. Chomsky, C. (1972). Stages in language development and reading exposure. *Harvard Educational Review, 42,* 1-33.

   Durkin, D. (1966). *Children who read early: Two longitudinal studies.* New York: Teachers College Press.

   McCormick, S. (1977). Should you read aloud to your children? *Language Arts, 54,* 139-143.

7. Heath (1982) op. cit.

8. Heath (1982) op. cit.

9. Chomsky, C. (1976). After decoding: What? *Language Arts, 53,* 288-296; 314.

   Samuels, S. J. (1985). Automaticity and repeated reading. In J. Osborn, P. T. Wilson, & R. C. Anderson (Eds.), *Reading education: Foundations for a literate America* (pp. 215-230). Lexington, MA: Lexington Books.

10. Durkin (1966) op. cit.

11. Research with very young children on invented spelling suggests that children's early experiences with "writing" may promote the development of letter-sound knowledge. E.g.:

    Chomsky, C. (1971). Write first, read later. *Childhood Education, 47,* 296-299.

    Chomsky, C. (1979). Approaching reading through invented spelling. In L. B. Resnick & P. A. Weaver (Eds.), *Theory and practice of early reading* (Vol. 2, pp. 43-65). Hillsdale, NJ: Erlbaum.

12. See Dunn, N. E. (1981). Children's achievement at school-entry age as a function of mothers' and fathers' teaching sets. *Elementary School Journal, 81,* 245-253.

13. Brzeinski, J. E. (1964). Beginning reading in Denver. *The Reading Teacher, 18,* 16-21. Also see Taylor, D. (1983). *Family literacy: Young children learning to read and write.* Exeter, NH: Heinemann.

14. Dunn (1981) op. cit. A similar finding is reported by Hess, R. D., Holloway, S., Price, G. G., & Dickson, W. (1979, November). *Family environments and acquisition of reading skills: Toward a more precise analysis.* Paper presented at the Conference on the Family as a Learning Environment, Educational Testing Service, Princeton, NJ.

15. See:

    Ball, S., & Bogatz, G. A. (1970). *The first year of "Sesame Street": An evaluation.* Princeton, NJ: Educational Testing Service.

    Bogatz, G. A., & Ball, S. (1971). *The second year of "Sesame Street": A continuing evaluation.* Princeton, NJ.: Educational Testing Service.

    Minton, J. H. (1972). *The impact of "Sesame Street" on reading readiness of kindergarten children.* Unpublished doctoral dissertation, Fordham University.

16. Entwistle, D., & Hayduk, L. (1978). *Too great expectations: The academic outlook of young children.* Baltimore, MD: Johns Hopkins University Press.

17. Stevenson, H. W. (1984). Making the grade: School achievement in Japan, Taiwan, and the United States. *Annual Report of the Center for Advanced Study in the Behavioral Sciences* (pp. 41-51). Stanford, CA.

18. Walberg, H. J., & Tsai, S. (1984). Reading achievement and diminishing returns to time. *Journal of Educational Psychology, 76,* 442-451.

19. See Becker, H. J., & Epstein, J. L. (1982). Parent involvement: A survey of teacher practice. *Elementary School Journal, 83,* 85-102.

20. Fielding, L. G., Wilson, P. T., & Anderson, R. C. (in press). A new focus on free reading:

The role of trade books in reading instruction. In T. Raphael & R. Reynolds (Eds.), *Contexts of literacy.* New York: Longman.

21. Ibid.

22. Williams, P. A., Haertel, E. H., Haertel, G. D., & Walberg, H. J. (1982). The impact of leisure-time television on school learning: A research synthesis. *American Educational Research Journal, 19,* 19-50.

23. See Note 15.

24. The term "readiness" was first explicitly applied to reading in 1925. See National Society for the Study of Education. (1925). *Report of the National Committee on Reading.* 24th Year Book of the National Society for the Study of Education. Bloomington, IN: Public School Publishing. Of the large number of papers on reading readiness which appeared during the 1930s, the most influential were:

Dolch, E. W., & Bloomster, M. (1937). Phonic readiness. *Elementary School Journal, 38,* 201-205.

Morphett, M. V., & Washburne, C. (1931). When should children begin to read? *Elementary School Journal, 31,* 496-503.

25. Robinson, H. M. (1972). Perceptual training: Does it result in reading improvement? In R. C. Aukerman (Ed.), *Some persistent questions on beginning reading.* Newark, DE: International Reading Association. There is also evidence, as indicated in this paper, that some of the tasks that children are supposed to master in the name of "reading" are actually harder for many children than reading words.

26. E.g.:

Beck, I. L. (1973). *A longitudinal study of the reading achievement effects of formal reading instruction in the kindergarten: A summative and formative evaluation.* Unpublished doctoral dissertation, University of Pittsburgh.

Bissex, G. (1980). *Gnys at wrk: A child learns to write and read.* Cambridge, MA: Harvard University Press.

Durkin, D. (1974-75). A six year study of children who learned to read in school at the age of four. *Reading Research Quarterly, 10,* 9-61.

Soderbergh, R. (1977). *Reading in early childhood: A linguistic study of a preschool child's gradual acquisition of reading ability.* Washington, DC: Georgetown University Press.

Taylor (1983) op. cit.

27. Becker, W. C., & Engelmann, S. (1978). *Analysis of achievement data on six cohorts of low-income children from 20 school districts in the University of Oregon Direct Instruction Follow Through Model* (Follow Through Project, Tech. Rep. No. 78-1). Eugene, OR: University of Oregon.

Meyer, L. A., Gersten, R. M., & Gutkin, J. (1983). Direct Instruction: A Project Follow Through success story in an inner-city school. *The Elementary School Journal, 84,* 241-252.

28. Darlington, R. B. (1981). The consortium for longitudinal studies. *Educational Evaluation and Policy Analysis, 3,* 37-45.

Lazar, I., Hubbel, V. R., Murray, H., Rosche, M., & Royce, J. (1977). *The persistence of preschool effects.* Washington, DC: Department of Health Education and Welfare.

Schweinhart, L. J., & Weikart, D. P. (1980). *Young children grow up: The effects of the Perry Preschool program on youths through age 15.* Ypsilanti, MI: High Scope Educational Research Foundation.

29. See:

Bagford, J. (1968). Reading readiness scores and success in reading. *The Reading Teacher, 21,* 324-328.

Lohnes, P. R., & Gray, M. M. (1972). Intelligence and the Cooperative Reading Studies. *Reading Research Quarterly, 7,* 466-476.

However, some studies report a weaker relationship between early listening comprehension proficiency and third grade reading achievement. E.g. Muehl, S., & Di Nello, M. C. (1976). Early first-grade skills related to subsequent reading performance: A seven year follow-up study. *Journal of Reading Behavior, 8,* 67-81.

30. Atkin, R., Bray, R., Davison, M., Herzberger, S., Humphreys, L., & Selzer, U. (1977). Cross-lagged panel analysis of sixteen cognitive measures at four grade levels. *Journal for Research in Child Development, 48,* 944-952. A review and an extension of this work appears in Humphreys, L. G., & Davey, T. C. (1983). *Anticipation of gains in general information: A comparison of verbal aptitude, reading comprehension, and listening* (Tech. Rep. No. 282).

Urbana: University of Illinois, Center for the Study of Reading.

31. See Mason, J. M. (1984). Early reading from a developmental perspective. In P. D. Pearson (Ed.), *Handbook of reading research* (pp. 505-543). New York: Longman.

32. Hiebert, E. H., & Sawyer, C. C. (1984, April). *Young children's concurrent abilities in reading and spelling*. Paper presented at the annual meeting of the American Educational Research Association, New Orleans, LA. Similar trends have been reported in Mason, J. M. (1980). When do children begin to read: An exploration of four-year-old children's letter and word reading competencies. *Reading Research Quarterly, 15,* 203-227.

33. Barrett, T. (1965). The relationship between measures of prereading, visual discrimination and first grade reading achievement: A review of the literature. *Reading Research Quarterly, 1,* 51-76.

    Bond, G. L., & Dykstra, R. (1967). The cooperative research program in first-grade reading instruction (entire issue). *Reading Research Quarterly, 2(4).*

    de Hirsch, K., Jansky, J. J, & Langford, W. D. (1966). *Predicting reading failure: A preliminary study.* New York: Harper & Row.

34. The effects of training in letter-names alone have been reported in:

    Muehl, S. (1962). The effects of letter-name knowledge on learning to read a word list in kindergarten children. *Journal of Educational Psychology, 53,* 181-186.

    Samuels, S. J. (1972). The effect of letter-name knowledge on learning to read. *American Educational Research Journal, 9,* 65-74.

    Silberberg, N. E., Silberberg, M. C., & Iversen, I. A. (1972). The effects of kindergarten instruction in alphabet and numbers on first grade reading. *Journal of Learning Disabilities, 5,* 254-261.

    Venezky, R. L. (1975). The curious role of letter names in reading instruction. *Visible Language, 9,* 7-23.

    The benefits in training in both letter-names and letter-sounds have been reported in Ohnmacht, D. D. (1969). *The effects of letter-knowledge on achievement in reading in the first grade.* Paper presented at the annual meeting of the American Educational Research Association, Los Angeles, CA. There is also evidence indicating that improved decoding ability is achieved when letter-sound training is combined with other types of training. See Jeffrey, W. E., & Samuels, S. J. (1967). The effect of method of reading training on initial learning and transfer. *Journal of Verbal Learning and Verbal Behavior, 6,* 354-358.

35. Clay, M. M. (1972). *Reading, the patterning of complex behavior.* Auckland, NZ: Heinemann.

    Downing, J. (1979, June). *Cognitive clarity and linguistic awareness.* Paper presented at the International Seminar on Linguistic Awareness and Learning to Read, University of Victoria, Victoria, BC.

    Ehri, L. (1979). Linguistic insight: Threshold of reading acquisition. In T. G. Waller & G. E. MacKinnon (Eds.), *Reading research: Advances in theory and practice* (Vol. 1, pp. 63-114). New York: Academic Press.

    Goodman, K., & Goodman, Y. (1979). Learning to read is natural. In L. B. Resnick & P. A. Weaver (Eds.), *Theory and practice of early reading* (Vol. 1, pp. 137-154). Hillsdale, NJ: Erlbaum.

    Harste, J. C., Burke, C. L., & Woodward, V. A. (1982). Children's language and world: Initial encounters with print. In J. Langer & M. Trika Smith-Burke (Eds.), *Reader meets author/Bridging the gap* (pp. 105-131). Newark, DE: International Reading Association.

    Mason (1980) op. cit.

36. For thoughtful discussions of children's first learning of words, letters, and sounds, see:

    Ehri, L. C., & Wilce, L. S. (1985). Movement into reading: Is the first stage of printed word learning visual or phonetic? *Reading Research Quarterly, 20,* 163-179.

    Gough, P. B., & Hillinger, M. L. (1980). Learning to read: An unnatural act. *Bulletin of the Orton Society, 30,* 180-196.

    Mason (1980) op. cit.

37. Martin, B., & Brogan, P. (1971). *Teacher's guide to the instant readers.* New York: Holt, Rinehart, & Winston.

38. Durkin (1966) op. cit.

39. Moore, O. K., & Anderson, A. R. (1968). The responsive environments project. In R. D.

Hess & R. M. Bear (Eds.), *Early education* (pp. 171-189). Chicago, IL: Aldine.

40. A general review of the value of early writing in helping young children refine their understanding of the written language system is provided by Dyson, A. H. (1984). Reading, writing, and language: Young children solving the written language puzzle. In J. M. Jensen (Ed.), *Composing and comprehending* (pp. 165-175). Urbana, IL: National Conference on Research in English and ERIC Clearinghouse on Reading and Communication Skills.

41. Chomsky (1971, 1979) op. cit.

    Read, C. (1971). Pre-school children's knowledge of English phonology. *Harvard Educational Review, 41*, 1-34.

42. Harste, J., Woodward, V. A., & Burke, C. L. (1984). *Language stories and literacy lessons.* Exeter, NH: Heinemann.

43. Educational Products Information Exchange. (1977). *Report on a national study of the nature and the quality of instructional materials most used by teachers and learners* (Tech. Rep. No. 76). New York: EPIE Institute.

    Fisher, C. W., Berliner, D., Filby, N., Marliave, R., Cohen, L., Dishaw, M., & Moore, J. (1978). *Teaching and learning in elementary schools: A summary of the beginning teacher evaluation study.* San Francisco, CA: Far West Regional Laboratory for Educational Research and Development. For a briefer account of this research, see Teaching behaviors, academic learning time, and student achievement: An overview. In C. Denham & A. Lieberman (Eds.). (1980). *Time to learn* (pp. 7-32). Washington, DC: National Institute of Education.

44. Anderson, L. (1984). The environment of instruction: The function of seatwork in a commercially developed curriculum. In G. G. Duffy, L. R. Roehler, & J. Mason (Eds.), *Comprehension instruction: Perspectives and suggestions* (pp. 93-103). New York: Longman.

    Fisher et al. (1978) op. cit.

    Mason, J., & Osborn, J. (1982). *When do children begin "reading to learn"?: A survey of classroom reading instruction practices in grades two through five* (Tech. Rep. No. 261). Urbana: University of Illinois, Center for the Study of Reading.

    Shannon, P. (1983). The use of commercial reading materials in American elementary schools. *Reading Research Quarterly, 19*, 68-85.

45. Perfetti, C. A., & Lesgold, A. M. (1979). Coding and comprehension in skilled reading and implications for reading instruction. In L. B. Resnick & P. A. Weaver (Eds.), *Theory and practice of early reading* (Vol. 1, pp. 57-84). Hillsdale, NJ: Erlbaum.

46. Smith, N. B. (1965). *American reading instruction.* Newark, DE: International Reading Association.

47. Mathews, M. M. (1966). *Teaching to read, historically considered.* Chicago, IL: University of Chicago Press.

48. Flesch, R. (1955). *Why Johnny can't read.* New York: Harper.

49. Chall, J. S. (1967). *Learning to read: The great debate.* New York: McGraw-Hill. In her recent update of the research from the past fifteen years (See Note 50), Chall found even stronger evidence for phonics.

50. Chall, J. S. (1983). *Learning to read: The great debate* (2nd ed.). New York: McGraw-Hill.

    Johnson, D. D., & Baumann, J. F. (1984). Word identification. In P. D. Pearson (Ed.), *Handbook of reading research* (pp. 583-608). New York: Longman.

    Pflaum, S. W., Walberg, H. J., Karegianes, M. L., & Rasher, S. P. (1980). Reading instruction: A quantitative analysis. *Educational Researcher, 9*, 12-18.

    Williams, J. P. (1985). The case for explicit decoding instruction. In J. Osborn, P. T. Wilson, & R. C. Anderson (Eds.), *Reading education: Foundations for a literate America* (pp. 205-213). Lexington, MA: Lexington Books.

51. Becker, W. C., & Gersten, R. (1982). A follow-up of Follow-Through: The later effects of the Direct Instruction model on children in fifth and sixth grades. *American Educational Research Journal, 19*, 75-92. For an examination of the long-term effects of the Direct Instruction model on students in high school, see Meyer, L. A. (1984). Long-term academic effects of the Direct Instruction Project Follow Through. *The Elementary School Journal, 84*, 380-394.

52. Alternative terms which have often been used for explicit and implicit phonics are synthetic and analytic phonics, deductive and inductive phonics, or direct and indirect phonics.

53. The slashes // indicate a speech sound. This is a notation used in the International Phonetic Alphabet. The complete notation system uses other special symbols to precisely identify sounds. In this document, the slashes will be used to indicate a speech sound, but the rest of the symbols will not be employed. When the slashes are used here, the intended sound can be determined from the context.

54. The examples used in text are generic examples that can be found in programs such as the following:

Buchanan, C. D. (1973). *Programmed reading: A Sullivan Associates program* (3rd ed.). New York: McGraw-Hill.

Engelmann, S., & Bruner, E. C. (1974). *Distar reading I: An instructional system* (2nd ed.). Chicago, IL: Science Research Associates.

Hughes, A., Bernier, S. A., Thomas, N., Bereiter, C., Anderson, V., Gurren, L., Lebo, J. D., & Overberg, J. A. (1982). *The Headway program.* La Salle, IL: Open Court.

Matteoni, L., Lane, W. H., Sucher, F., & Yawkey, T. D., Harris, T. L., & Allen, H. B. (1984). *The Keytext program.* Oklahoma City, OK: The Economy Company.

55. See Rosenshine, B., & Stevens, R. (1984). Classroom instruction in reading. In P. D. Pearson (Ed.), *Handbook of reading research* (pp. 745-798). New York: Longman. For an experimental study in which blending facilitates the word recognition performance of kindergarten children, see Haddock, M. (1976). The effects of an auditory and auditory-visual method of blending instruction on the ability of prereaders to decode synthetic words. *Journal of Educational Psychology, 68,* 825-831.

56. Beck, I. L., & McCaslin, E. S. (1978). *An analysis of dimensions that affect the development of code-breaking ability in eight beginning reading programs* (LRDC Publication 1978/6). Pittsburgh, PA: University of Pittsburgh, Learning Research and Development Center.

57. The examples used in text are generic examples that can be found in programs such as the following:

Aaron, I. E., Jackson, D., Riggs, C., Smith, R. G., & Tierney, R. J. (1983). *Scott, Foresman reading.* Glenview, IL: Scott Foresman & Company.

Clymer, T., Venezky, R. L., & Indrisano, R. (1984). *Ginn reading program.* Lexington, MA: Ginn & Company.

Early, M., Cooper, E. K., & Santeusanio, N. (1983). *HBJ Bookmark reading program.* Orlando, FL: Harcourt Brace Jovanovich.

It should be noted that one program that employs an implicit phonics approach does allow the teacher to produce some vowel sounds in isolation. See Durr, W. K., LePere, J. M., Pescosolido, J., Bean, R. M., & Glaser, N. A. (1983). *Houghton Mifflin reading program.* Boston, MA: Houghton Mifflin Company.

58. Durkin, D. (1983). *Is there a match between what elementary teachers do and what basal reader manuals recommend?* (Reading Ed. Rep. No. 44). Urbana: University of Illinois, Center for the Study of Reading. A briefer account of this research is available under the same title in *The Reading Teacher* (1984), *37,* 734-744.

59. E.g.:

Bruce, D. J. (1964). Analysis of word sounds by young children. *British Journal of Educational Psychology, 34,* 158-169.

Calfee, R. C., Chapman, R. S., & Venezky, R. L. (1972). How a child needs to think to learn to read. In L. W. Gregg (Ed.), *Cognition in learning and memory.* New York: Wiley.

Liberman, I. Y. (1973). Segmentation of the spoken word and reading acquisition. *Bulletin of the Orton Society, 23,* 65-77.

Liberman, I. Y., Cooper, F. S., Shankweiler, D., & Studdert-Kennedy, M. (1967). Perception of the speech code. *Psychological Review, 74,* 431-461.

Rosner, J. (1973). Language arts and arithmetic achievement and specifically related perceptual skills. *American Educational Research Journal, 10,* 59-68.

60. Resnick, L. B., & Beck, I. L. (1976). Designing instruction in reading: Interaction of theory and practice. In J. T. Guthrie (Ed.), *Aspects of reading acquisition* (pp. 180-204). Baltimore, MD: Johns Hopkins University Press.

61. Cohen, A. S. (1974-1975). Oral reading errors of first-grade children taught by a code-emphasis approach. *Reading Research Quarterly, 10,* 616-650.

Norton, D. (1976). A comparison of the oral reading errors of high and low ability first and third graders taught by two approaches — synthetic phonic and analytic-eclectic. (Doctoral dissertation, University of Wisconsin-Madison). *Dissertation Abstracts Inernational, 37,* 3399A.

62. Biemiller, A. (1970). The development of the use of graphic and contextual information as children learn to read. *Reading Research Quarterly, 6,* 75-96.

63. Carnine, L., Carnine, D., & Gersten, R. (1984). Analysis of oral reading errors made by economically disadvantaged students taught with a synthetic-phonics approach. *Reading Research Quarterly, 19,* 343-356.

64. Goodman, K. S. (1976). The reading process: A psycholinguistic view. In E. B. Smith, K. S. Goodman, & R. Meredith. *Language and thinking in school* (pp.265-283). New York: Holt, Rinehart & Winston. Kenneth Goodman also provides pertinent comment on the efficacy of phonics instruction in *Reading: A conversation with Kenneth Goodman.* (1976). Glenview, IL: Scott, Foresman and Company, p.7.

    Smith, F. (1973). Decoding: The great fallacy. In F. Smith (Ed.), *Psycholinguistics and reading* (pp. 70-83). New York: Holt, Rinehart & Winston.

65. See Note 50.

66. The advantages of having children identify words by analogy with other known words was first noted by Gates, A. I., & Russell, D. H. (1938). Types of materials, vocabulary burden, word analysis, and other factors in beginning reading. II. *Elementary School Journal, 39,* 119-128. For a recent application of this approach, see Cunningham, P. M. (1975-1976). Investigating a synthesized theory of mediated word identification. *Reading Research Quarterly, 11,* 127-143.

67. To simplify this discussion, "pre-primers" and "first readers" are being included together with primers.

68. For thoughtful discussions of the characteristics of primers, see:

    Beck, I. L. (1981). Reading problems and instructional practices. In G. E. MacKinnon & T. G. Waller (Eds.), *Reading research: Advances in theory and practice* (Vol. 2, pp. 53-95). New York: Academic Press.

    Willows, D. M., Borwick, D., & Hayvren, M. (1981). The content of school readers. In G. E. MacKinnon & T. G. Waller (Eds.), *Reading research: Advances in theory and practice* (Vol. 2, pp. 97-175). New York: Academic Press.

69. For a description of the informal methods of instruction used in New Zealand, see Clay, M. M. (1976). Early childhood and cultural diversity in New Zealand. *The Reading Teacher, 29,* 333-342. Favorable results seem to have been achieved by these methods, as suggested by recent cross-national studies of reading:

    Guthrie, J. (1981). Reading in New Zealand: Achievement and volume. *Reading Research Quarterly, 17,* 6-27.

    Purves, A. C. (1973). *Literature education in ten countries: An empirical study.* New York: Wiley.

    Thorndike, R. L. (1973). *Reading comprehension education in fifteen countries: An empirical study.* New York: Wiley.

70. Bond & Dykstra (1967) op. cit.

71. From "Mix and make". (1982). In T. Clymer & R. L. Venezky, *Ginn reading program* (Level 3, Unit 2). Lexington, MA: Ginn & Company, pp. 36-37.

72. From "At the seashore". (1982). In A. Hughes, S. A. Bernier, N. Thomas, C. Bereiter, V. Anderson, L. Gurren, J. D. Lebo, & J. A. Overberg. *The Headway program* (Level B-1, Lesson 17). LaSalle, IL: Open Court, p. 67.

73. Beck (1981) op. cit.

74. Ruddell, R. B. (1965). The effect of oral and written patterns of language structure on reading comprehension. *The Reading Teacher, 18,* 270-275.

    Tatham, S. M. (1970). Reading comprehension of materials written with select oral language patterns: A study at grades two and four. *Reading Research Quarterly, 3* 402-426.

    Wilkinson, I. A. G., & Brown, C. A. (1983). Oral reading strategies of year one children as a function of level of ability and method of instruction. *Reading Psychology, 4,* 1-9.

75. Dr. Seuss. (1960). *Green eggs and ham.* New York: Beginner Press.

76. Mason & Osborn (1982) op. cit.

    Shannon (1983) op. cit.

77. Durkin (1983) op. cit.

Mason, J. (1983). An examination of reading instruction in third and fourth grades. *The Reading Teacher, 36,* 906-913.

78. Durkin (1983) op. cit.

Mason & Osborn (1982) op. cit.

79. E.g:

Hansen, J. (1981). The effects of inference training and practice on young children's reading comprehension. *Reading Research Quarterly, 16,* 391-417.

Hansen, J., & Pearson, P. D. (1983). An instructional study: Improving the inferential comprehension of good and poor fourth-grade readers. *Journal of Educational Psychology, 75,* 821-829.

Omanson, R. C., Beck, I. L., Voss, J. F., & McKeown, M. G. (1984). The effects of reading lessons on comprehension: A processing description. *Cognition and Instruction, 1,* 45-67.

80. Beck, I. L., McCaslin, E. S., & McKeown, M. G. (1981). Basal readers' purpose for story reading: Smoothly paving the road or setting up a detour? *Elementary School Journal, 81,* 156-161.

81. Beck, I. L., Omanson, R. C., & McKeown, M. G. (1982). An instructional redesign of reading lessons: Effects on comprehension. *Reading Research Quarterly, 17,* 462-481.

82. Ibid.

83. Allington, R. L. (1982). *Amount and mode of contextual reading as a function of reading group membership.* Paper presented at the National Council of Teachers of English, Washington, DC.

84. This conclusion is suggested by studies of repeated reading (see Samuels, 1985 op. cit.) and by research described by Brecht, R. D. (1977). Testing format and instructional level with the informal reading inventory. *The Reading Teacher, 31,* 57-59.

85. Durkin (1983) op. cit.

86. Collins, J. (1980). *Differential treatment in reading instruction.* Berkely, CA: Language Behavior Research Laboratory.

87. Anderson, L. M., Evertson, C. M., & Brophy, J. E. (1979). An experimental study of effective teaching in first-grade reading groups. *The Elementary School Journal, 79,* 193-223.

Hoffman, J. V., O'Neal, S. F., Kastler, L. A., Clements, R. O., Segel, K. W., & Nash, M. F. (1984). Guided oral reading and miscue focused verbal feedback in second-grade classrooms. *Reading Research Quarterly, 19,* 367-384.

88. Anderson, R. C., Mason, J., & Shirey, L. (1984). The reading group: An experimental investigation of a labyrinth. *Reading Research Quarterly, 20,* 6-38.

89. E.g. Anderson, Evertson, & Brophy (1979) op. cit.

90. Dahl, P. R., & Samuels, S. J. (1979). An experimental program for teaching high speed word recognition and comprehension skills. In J. E. Button, T. C. Lovitt, & T. D. Rowland (Eds.), *Communications research in learning disabilities and mental retardation.* Baltimore, MD: University Park Press.

Herman, P. A. (in press). The effect of repeated readings on reading rate, speech pauses and word recognition accuracy. *Reading Research Quarterly.*

Samuels (1985) op. cit.

91. Allington, R. L. (1984). Oral reading. In P. D. Pearson (Ed.), *Handbook of reading research* (pp. 829-864). New York: Longman.

Leinhardt, G., Zigmond, N., & Cooley, W. W. (1981). Reading instruction and its effects. *American Educational Research Journal, 18,* 343-361.

92. See Tharp, R. G. (1982). The effective instruction of comprehension: Results and description of the Kamehameha Early Education Program. *Reading Research Quarterly, 17,* 503-527.

93. Bransford, J. D., Stein, B. S., Vye, N. J., Franks, J. J., Auble, P. M., Mezynski, K. J., & Perfetto, G. A. (1982). Differences in approaches to learning: An overview. *Journal of Experimental Psychology: General, 111,* 390-398. Also see the subsequent three papers by Bransford and his colleagues in this volume.

Owings, R. A., Peterson, G. A., Bransford, J. D., Morris, C. D., & Stein, B. S. (1980). Spontaneous monitoring and regulation of learning: A comparison of successful and less successful fifth graders. *Journal of Educational Psychology, 72,* 250-256.

Paris, S. G., & Lindauer, B. K. (1976). The role of inference in children's comprehension

and memory for sentences. *Cognitive Psychology, 8,* 217-227.

94. Beck, Omanson, & McKeown (1982) op. cit.

    Hansen (1981) op. cit.

    Hansen & Pearson (1983) op. cit.

95. Durkin (1983) op. cit.

96. Beck, I. L., & McKeown, M. G. (1981). Developing questions that promote comprehension: The story map. *Language Arts, 58,* 913-918.

97. See Duffy, G. G. (1981). Teacher effectiveness research: Implications for the reading profession. In M. L. Kamil (Ed.), *Directions in reading: Research and instruction* (pp. 113-136). Washington, DC: National Reading Conference.

98. Rosenshine & Stevens (1984) op. cit.

Extending Literacy

1. Hirsch, E. D., Jr. (1983). Cultural literacy. *The American Scholar, 53,* 159-169.

2. Fry, E. B. (1968). A readability formula that saves time. *The Journal of Reading, 11,* 513-516; 575-578.

3. Chall, J. S. (1958). *Readability: An appraisal of research and application.* Columbus, OH: Ohio State University.

   Klare, G. R. (1984). Readability. In P. D. Pearson (Ed.), *Handbook of reading research* (pp. 681-744). New York: Longman.

4. Klare (1984) op. cit. pp. 717-718.

5. Chall, J. S. (1984). Readability and prose comprehension: continuities and discontinuities. In J. Flood (Ed.), *Understanding reading comprehension: Cognition, language and the structure of prose.* Newark, DE: International Reading Association.

   Davison, A. (1984). Readability — appraising text difficulty. In R. C. Anderson, J. Osborn, & R. J. Tierney (Eds.), *Learning to read in American schools: Basal readers and content texts* (pp. 121-139). Hillsdale, NJ: Erlbaum.

6. The rewritten version is from "Little Hippo". (1980). In W. Eller, K. B. Hester et al. *The Laidlaw reading program* (Level 6, Reader 1). River Forest, IL: Laidlaw Brothers, p. 46. It was adapted from the original by Bennett, R. (1960). *The secret hiding place.* Cleveland, OH: World, p. 1.

7. Ibid. pp. 48 and 3 respectively.

8. Applebee, A. N. (1980). Children's narratives: New directions. *The Reading Teacher, 34,* 137-142.

   Stein, N. L., & Trabasso, T. (1982). What's in a story: An approach to comprehension and instruction. In R. Glaser (Ed.), *Advances in instructional psychology* (Vol. 2, pp. 213-254). Hillsdale, NJ: Erlbaum.

9. Stein & Trabasso (1982) op. cit.

10. Beck, I. L., McKeown, M. G., & McCaslin, E. S. (1981). Does reading make sense? Problems of early readers. *The Reading Teacher, 34,* 780-785.

    Stein & Trabasso (1982) op. cit.

11. Bruce, B. C. (1984). A new point of view on children's stories. In R. C. Anderson, J. Osborn, & R. J. Tierney (Eds.), *Learning to read in American schools: Basal readers and content texts* (pp. 153-174). Hillsdale, NJ: Erlbaum.

    Steinberg, C., & Bruce, B. C. (1980). *Higher-level features in children's stories: Rhetorical structure and conflict* (Reading Ed. Rep. No. 18). Urbana: University of Illinois, Center for the Study of Reading.

    Willows, D. M., Borwick, D., & Hayvren, M. (1981). The content of school readers. In G. E. MacKinnon & T. G. Waller (Eds.), *Reading research: Advances in theory practice* (Vol. 2, pp. 97-175). New York: Academic Press.

12. From "The raccoon and Mrs. McGinnis". (1976). In T. Clymer & P. M. Martin, *Reading 720* (Level 7, Unit 6). Lexington, MA: Ginn & Company, p. 234.

13. Beck, I. L., McKeown, M. G., Omanson, R. C., & Pople, M. T. (1984). Improving the comprehensibility of stories: The effects of revisions that improve coherence. *Reading Research Quarterly, 19,* 263-277.

14. Blom, G. E., Waite, R. W., & Zimet, S. G. (1970). A motivational content analysis of children's primers. In H. Levin & J. P. Williams (Eds.), *Basic studies on reading* (pp. 188-221). New York: Basic Books.

    Bruce (1984) op. cit.

    Chall, J. S., Conrad, S. S., and Harris, S. H. (1977). *An analysis of textbooks in relation to declining SAT scores.* New York: College Entrance Examination Board.

    Chall, J. S., Conrad, S. S., and Harris-Shar-

ples, S. H. (1983). *Textbooks and challenge: An inquiry into textbook difficulty, reading achievement, and knowledge acquisition.* Final report to the Spencer Foundation.

15. Gallagher, M. C., & Pearson, P. D. (1982). *An examination of expository texts in elementary instructional materials.* Paper presented at the National Reading Conference, Clearwater, FL.

    Gallagher, M. C., & Pearson, P. D. (1983). *Fourth grade students' acquisition of new information from text.* Paper presented at the National Reading Conference, Austin, TX.

16. Bartlett, B. J. (1978). *Top-level structure as an organizational strategy for recall of classroom text.* Unpublished doctoral dissertation, Arizona State University.

    Meyer, B. J. F., Brandt, D. M., & Bluth, G. J. (1980). Use of top-level structure in text: Key for reading comprehension of ninth-grade students. *Reading Research Quarterly, 16,* 72-103.

17. The classic reference on this point is Bruner, J. (1960). *The process of education.* Cambridge, MA: Harvard University Press.

18. Anderson, T. H., & Armbruster, B. B. (1984). Content area textbooks. In R. C. Anderson, J. Osborn, & R. J. Tierney (Eds.), *Learning to read in American schools: Basal readers and content texts* (pp. 193-226). Hillsdale, NJ: Erlbaum.

    Armbruster, B. B. (1984). The problem of "inconsiderate text". In G. G. Duffy, L. R. Roehler, & J. Mason (Eds.), *Comprehension instruction: Perspectives and suggestions* (pp. 202-217). New York: Longman.

19. This example is described in Armbruster, B. B., & Anderson, T. H. (1984). Structures of explanations in history textbooks or so what if Governor Stanford missed the spike and hit the rail? *Journal of Curriculum Studies, 16,* 181-194.

20. Ibid.

21. Herman, P. A. (1984, December). *Incidental learning of word meanings from expository texts that systematically vary text features.* Paper presented at the National Reading Conference, St. Petersburg, FL.

22. The rewritten version is from Herman, P. A. (in preparation). *Incidental learning of word meanings from expository texts that systematically vary text features.* Unpublished doctoral dissertation, University of Illinois. It was adapted from the original "Circulation, respiration, and excretion". (1977). In C. Heimler & J. Lockard. *Life science* (pp. 272-280). Columbus, OH: Charles Merrill Publishing, p. 273.

23. Herman (1984, December) op. cit.

24. See, for example:

    Baumann, J. F. (1984). The effectiveness of a direct instruction paradigm for teaching main idea comprehension. *Reading Research Quarterly, 20,* 93-115.

    Patching, W., Kameenui, E., Carnine, D., Gersten, R., & Colvin, G. (1983). Direct instruction in critical reading skills. *Reading Research Quarterly, 18,* 406-418.

    Palincsar, A. S., & Brown, A. L. (1984). Reciprocal teaching of comprehension-fostering and comprehension-monitoring activities. *Cognition and Instruction, 1,* 117-175.

    Paris, S. G., Cross, D. R., & Lipson, M. Y. (1984). Informed strategies for learning: A program to improve children's reading awareness and comprehension. *Journal of Educational Psychology, 76,* 1239-1252.

25. See Paris, S. G. (in press). Teaching children to guide their reading and learning. In T. E. Raphael & R. Reynolds (Eds.), *Contexts of literacy.* New York: Longman.

26. Duffy, G. G. (1981). Teacher effectiveness research: Implications for the reading profession. In M. L. Kamil (Ed.), *Directions in reading: Research and instruction* (pp. 113-136). Washington, DC: National Reading Conference.

27. Palincsar & Brown (1984) op. cit.

28. Paris, Cross, & Lipson (1984) op. cit.

29. Durkin, D. (1978-1979). What classroom observations reveal about reading comprehension instruction. *Reading Research Quarterly, 14,* 481-533.

    Neilsen, A. R., Rennie, B. J., & Connell, A. M. (1982). Allocation of instructional time to reading comprehension and study skills in intermediate grade social studies classrooms. In J. A. Niles & L. A. Harris (Eds.), *New inquiries in reading research and instruction* (pp. 81-84). Rochester, NY: National Reading Conference.

30. Durkin (1978-1979) op. cit.

31. Hare, V. C., & Milligan, B. (1984). Main idea

identification: Instructional explanations in four basal reader series. *Journal of Reading Behavior, 16,* 189-204.

32. Fisher, C. W., Berliner, D., Filby, N., Marliave, R., Cohen, L., Dishaw, M., & Moore, J. (1978). *Teaching and learning in elementary schools: A summary of the beginning teacher evaluation study.* San Francisco, CA: Far West Regional Laboratory for Educational Research and Development. For a briefer account of this research, see Teaching behaviors, academic learning time, and student achievement: An overview. In C. Denham & A. Lieberman (Eds.). (1980). *Time to learn* (pp. 7-32). Washington, DC: National Institute of Education.

33. Osborn, J. (1984). The purposes, uses, and contents of workbooks and some guidelines for publishers. In R. C. Anderson, J. Osborn, & R. J. Tierney (Eds.), *Learning to read in American schools: Basal readers and content texts* (pp. 45-111). Hillsdale, NJ: Erlbaum.

    Osborn, J. (1985). Workbooks: Counting, matching, and judging. In J. Osborn, P. T. Wilson, & R. C. Anderson, (Eds.), *Reading education: Foundations for a literate America* (pp. 11-28). Lexington, MA: Lexington Books.

34. This example is described in Osborn, J. (1984). *Evaluating workbooks* (Reading Ed. Rep. No. 52). Urbana: University of Illinois, Center for the Study of Reading, p. 23.

35. Anderson, L. (1984). The environment of instruction: The function of seatwork in a commercially developed curriculum. In G. G. Duffy, L. R. Roehler, & J. Mason (Eds.), *Comprehension instruction: Perspectives and suggestions* (pp. 93-103). New York: Longman.

36. This conclusion is suggested by the research described in:

    Leinhardt, G., Zigmond, N., & Cooley, W. W. (1981). Reading instruction and its effects. *American Educational Research Journal, 18,* 343-361.

    Rosenshine, B., & Stevens, R. (1984). Classroom instruction in reading. In P. D. Pearson (Ed.), *Handbook of reading research* (pp. 745-798). New York: Longman.

37. Allington, R. L. (1984) Oral reading. In P. D. Pearson (Ed.), *Handbook of reading research* (pp. 829-864). New York: Longman.

    Elley, W. B., & Mangubhai, F. (1983). The impact of reading on second language learning. *Reading Research Quarterly, 19,* 53-67.

    Ingham, J. (1981). *Books and reading development.* London: Heinemann.

    Leinhardt, Zigmond, & Cooley (1981) op. cit.

38. Dishaw, M. (1977). *Descriptions of allocated time to content areas for the A-B period* (Beginning Teacher Evaluation Study Tech. Note IV-11a). San Francisco, CA: Far West Regional Laboratory for Educational Research and Development.

39. Fielding, L. G., Wilson, P. T., & Anderson, R. C. (in press). A new focus on free reading: The role of trade books in reading instruction. In T. E. Raphael & R. Reynolds (Eds.), *Contexts of literacy.* New York: Longman.

    Greany, V. (1980). Factors related to amount and type of leisure time reading. *Reading Research Quarterly, 15,* 337-357.

    Heyns, B. (1978). *Summer learning and the effects of schooling.* New York: Academic Press.

    Walberg, H. J., & Tsai, S. (1984). Reading achievement and diminishing returns to time. *Journal of Educational Psychology, 76,* 442-451.

40. Fielding, Wilson, & Anderson (in press) op. cit.

41. Fielding, Wilson, & Anderson (in press) op. cit.

42. Nagy, W. E., Herman, P. A., & Anderson, R. C. (1985). Learning words from context. *Reading Research Quarterly, 20,* 233-253.

43. Ibid.

44. Fielding, Wilson, & Anderson (in press) op. cit.

45. Fielding, Wilson, & Anderson (in press) op. cit.

46. Heyns (1978) op. cit.

47. Statistics quoted to this point in the paragraph are from Heintze, R. A., & Hodes, L. (1981). *Statistics of public school libraries/media centers 1978 Fall.* Washington DC: National Center for Education Statistics.

48. Libraries and the Learning Society. (1984). *Alliance for excellence: Librarians respond to A Nation at Risk.* Washington, DC: U.S. Department of Education, p. 14.

49. Elley & Mangubhai (1983) op. cit.

    Ingham (1981) op. cit.

50. Elley & Mangubhai (1983) op. cit.

51. Fielding, Wilson, & Anderson (in press) op.

cit.

Ingham (1981) op. cit.

52. For a comprehensive review of the literature in this area, see Tierney, R. J., & Leys, M. (in press). What is the value of connecting reading and writing? In B. Peterson (Ed.), *Convergences: Essays on reading, writing, and literacy.* Urbana, IL: National Council of Teachers of English.
53. From Calkins, L. (1983). *Lessons from a child.* Exeter, NH: Heinemann, p. 157.
54. Bridge, C. A., & Hiebert, E. H. (in press). A comparison of classroom writing practices, teachers' perceptions of their writing instructions, and textbook recommendations on writing practices. *Elementary School Journal.*
55. Applebee, A. N. (1981). *Writing in the secondary school.* Urbana, IL: National Council of Teachers of English.
56. See Braddock, R., Lloyd-Jones, R., & Schoer, L. (1963). *Research in written composition.* Urbana, IL: National Council of Teachers of English. For pertinent comment on the role of formal grammar instruction in helping students learn how to use language for communicative purposes, see Postman, N. (1967). Linguistics and the pursuit of relevance. *English Journal, 56,* 1160-1165.
57. This conclusion is suggested by the research desribed in:

    Calkins, L. M. (1980, May). When children want to punctuate: Basic skills belong in context. *Language Arts, 57,* 567-573.

    Graves, D. H. (1982). *A case study observing the development of primary children's composing, spelling, and motor behaviors during the writing process* (Final Report Project No. 8-3419-0963). Washington, DC: National Institute of Education.
58. Staton, J., Shuy, R., & Kreeft, J. (1982). *Analysis of dialogue journal writing as a communicative event, Volumes I and II.* (NIE-G-80-0122). Final report to the National Institute of Education.

The Teacher and the Classroom

1. These studies are reviewed by Rosenshine, B., & Stevens, R. (1984). Classroom instruction in reading. In P. D. Pearson (Ed.), *Handbook of reading research.* (pp. 745-798). New York: Longman.
2. Lohnes, P. R., & Gray, M. M. (1972). Intellectual development and the Cooperative Reading Studies. *Reading Research Quarterly, 8,* 52-61.
3. Rosenshine & Stevens (1984) op. cit.
4. Rosenshine & Stevens (1984) op. cit.
5. Dishaw, M. (1977). *Descriptions of allocated time to content areas for the A-B period* (Beginning Teacher Evaluation Study Tech. Note IV-11a). San Francisco, CA: Far West Regional Laboratory for Educational Research and Development.
6. Brophy, J. E., & Good, T. L. (in press). Teacher behavior and student achievement. In M. C. Wittrock (Ed.), *Handbook of research on teaching* (3rd ed.). New York: Macmillan.

    Rosenshine & Stevens (1984) op. cit.
7. Brophy, J. E. (1983). Classroom organization and management. *Elementary School Journal, 83,* 265-285.

    Doyle, W. (in press). Classroom organization and management. In M. C. Wittrock (Ed.), *Handbook of research on teaching* (3rd ed.). New York: Macmillan.
8. Ibid.
9. Brophy, J. E., & Evertson, C. M. (1976). *Learning from teachers: A developmental perspective.* Boston, MA: Allyn and Bacon.
10. Barr, R., & Dreeben, R. (1983). *How schools work.* Chicago, IL: University of Chicago Press.
11. Allington, R. (1984). Content coverage and contextual reading in reading groups. *Journal of Reading Behavior, 16,* 85-96. A similar pattern of results has been reported by Gambrell, L. B. (1984). How much time do children spend reading during teacher-directed reading instruction? In J. A. Niles & L. A. Harris (Eds.), *Changing perspectives on research in reading/language processing and instruction* (pp. 193-198). Rochester, NY: National Reading Conference.
12. See Rosenshine & Stevens (1984) op. cit.
13. Kulik, C. C., & Kulik, J. A. (1982). Effects of ability grouping on secondary school students: A meta-analysis of evaluation findings. *American Educational Research Journal, 19,* 415-428.
14. This conclusion is suggested by research de-

scribed in Cazden, C. B. (1979). Learning to read in classroom interaction. In L. B. Resnick & P. A. Weaver (Eds.), *Theory and practice of early reading* (Vol. 3, pp. 295-306). Hillsdale, NJ: Erlbaum

15. Hiebert, E. H. (1983). An examination of ability grouping for reading instruction. *Reading Research Quarterly, 18,* 231-255.

16. Eder, D., & Felmlee, D. (1984). The development of attention norms in ability groups. In P. Peterson, L. Wilkinson, & N. Hallinan (Eds.), *The social context of instruction* (pp. 189-208). Orlando, FL: Academic Press.

17. McDermott, R. P. (1976). *Kids make sense: An ethnographic account of the interactional management of success and failure in one first-grade classroom.* Unpublished doctoral dissertation, Stanford University.

18. Hiebert (1983) op. cit.

19. Allington, R. L. (1983). The reading instruction provided readers of differing ability. *Elementary School Journal, 83,* 255-265.

    Weinstein, R. S. (in press). The teaching of reading and children's awareness of teacher expectations. In T. E. Raphael & R. Reynolds (Eds.), *Contexts of literacy.* New York: Longman.

20. Hiebert (1983) op. cit.

21. Anderson, R. C., Shirey, L. L., Wilson, P. T., & Fielding, L. G. (in press). Interestingness of children's reading material. In R. E. Snow & M. J. Farr (Eds.), *Aptitude, learning, and instruction: Conative and affective process analyses.* Hillsdale, NJ: Erlbaum.

22. E.g:

    Engelmann, S., & Bruner, E. C. (1974). *Distar reading I, II: An instructional system* (2nd ed.). Chicago, IL: Science Research Associates.

    Hughes, A., Bernier, S. A., Thomas, N., Bereiter, C., Anderson, V., Gurren, L., Lebo, J. D., & Overberg, J. A. (1982). *The Headway program.* La Salle, IL: Open Court.

23. See:

    Glass, G. V. (1984). *The effectiveness of four educational interventions* (Project Rep. No. 84-A19). Stanford, CA: Stanford University, Institute for Research on Educational Finance and Governance.

    Slavin, R. E. (1984). Team Assisted Individualization: Cooperative learning and individualized instruction in the mainstreamed classroom. *Remedial and Special Education, 5,* 33-42.

    Slavin, R. E., & Karweit, N. L. (1984). Mastery learning and student teams: A factorial experiment in urban general mathematics classes. *American Educational Research Journal, 21,* 725-736

Becoming a Nation of Readers: A Reaction from the Primary Immersion Teacher's Viewpoint

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Becoming a Nation of Readers: A Reaction from the Primary Immersion Teacher's Viewpoint

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Of all the anxieties that parents bring to kindergarten and first grade teachers, none are as passionate, extreme and real as anxieties about reading. And when the kindergarten or first grade class is a language immersion class, these anxieties increase a hundredfold! It is important for teachers of immersion classes to understand parental concerns, to anticipate them and to know how to respond to them. We can only do so if we ourselves understand what the issues and challenges of the teaching of reading are, generally, and how we as immersion teachers can deal with these.

Our students will be part of this "nation of readers" about whom the Commission of Reading reports in its document, Becoming a Nation of Readers. Thus, our goal needs to be common with the goal of all teachers: to teach children the complex skill of reading as described in the document's first chapter "What Is Reading?". And since we are teaching in a second language, our children will develop this complex skill in the language of instruction as well as in English. Do we then have special considerations that are separate from those discussed in Becoming A Nation of Readers? Based on my experience as a first grade immersion teacher, I feel that we do.

Our students, like those described in chapter 2, will be at home when they take their "first critical steps" in the process of learning to read. With their parents, their siblings, the television, etc., they will learn about the world around them and develop the concepts necessary for understanding. They will be introduced to the written word at home when their parents read to them and ask them thought-provoking questions about the books they read. These steps will be just as important in learning to read for immersion students as they are for their counterparts in the regular classroom. However, the oral language that immersion students will be acquiring at home to express what they learn will be in their native language and basic grammar and sentence structure learned will be in the native language. Thus, although very fundamental steps in learning to read in the native language--the development of oral language, of grammatical patterns and of sentence structure--will have been introduced at home, the altering or adapting of these skills to the immersion language will have a definite impact on how teachers build the reading program in the early primary grades and, especially, on the concept of reading readiness in the immersion class.

The Development of Oral Language Skills

The immersion teacher needs to begin this altering or adapting with the first skill acquired by the child: oral language. Becoming a Nation of Readers suggests that children are ready to read when they have had ample experience with oral and printed language. Our students have had little or no experience with the oral or written second language. So, the kindergarten and first grade teachers need to provide myriad opportunities for the child to hear oral language. And, it stands to reason that this second language input must take place in the context of the curriculum so that the child is hearing and learning the language he needs to know in order to grasp the concept that the teacher wants to teach. Thus, if the first grade social studies objective is for children to distinguish between foods that nourish the body and those that do not, the teacher will have a selection of foods in front of the class and will use the names of these foods repeatedly while visually or actively conveying the concepts of nourishing and harmful. We do not expect babies to talk intelligibly until they have listened for about a year and a half; we also need to give beginning immersion students opportunities to hear as much oral language as possible in their early immersion "life"--so that they, too, can develop oral language, although this period of time must be determined by the immersion teacher, based on the progress and development of the child and the class. The teacher needs to provide as many content-based experiences for oral language development as possible, beginning the first day of school.

Content-based language may not be enough. Many of our students will have a reasonable range of knowledge about the world around them but because they do not have sufficient proficiency in the second language, they will not be able to express this knowledge, relate it to new concepts being learned, read about it and write about it. Thus, as early primary immersion teachers, we need to foster an environment where kindergarteners or first graders know that they can communicate by visuals, by demonstration, by drawing, and by the strategy of negotiation of meaning. We also must take advantage of every content-based lesson to expand oral language experiences. For example, the kindergarten teacher may be speaking about the family. One student may contribute a comment in English about his grandfather who lives in New York. Ten hands may shoot up, indicating to the teacher that 10 other students want to talk about where their grandparents live. The teacher should capitalize on such enthusiasm by repeating the child's answer in the second language, bringing down the wall map, showing where New York is, and where other major cities are, all the while giving information in the target language. Thus, in addition to the content objective being taught (the family), students will hear, understand and perhaps, later, use words about map skills, names of cities, cardinal points, spatial relationships, and distance. The teacher can also write the names of the cities and other information discussed on the board, giving written language information at the same time.

There is another type of oral language that is important for the immersion teacher to remember in the development of oral language skills and this is "social" language. There is no caregiver speech at home in the second language that will model how to thank, to invite, to persuade, etc. Thus, immersion teachers must be aware of opportunities in the school day (snack time, class games, circle time), in the curriculum (role -playing, issuing invitations, etc.), in the normal conversation of class ("how was your weekend?", "tell me about who you invited," etc.) in which they can model social language. Using children's literature that contains rich dialogue about social situations is another way that teachers can develop this social language that is developed at home in the first language.

Reading aloud to students is another excellent opportunity for the immersion primary teacher to provide or stretch students' background information, oral language and written language skills. When introducing a curriculum objective through reading a trade book, teachers can often ascertain what background knowledge is missing in some students and supply it. It is also a way to develop rich vocabulary that students might not learn in everyday conversation. Very often, reading a book that contains a repeated sentence or phrase will encourage oral repetition, even in the non risk-taking child for whom this might be the first output of the second language.

The Link Between Oral and Written Language

Although I feel that this prereading state (for the development of oral language) is so terribly important in the early primary immersion class, it cannot be isolated from the written word. Students need to understand the very real correlation between oral and written language. Having labels on classroom furniture and props, writing key words on the board, going over the written daily schedule that has both pictorial and written cues, writing class-composed language experience stories and journals, showing the text of big books as they are being read, pointing out important letter-sound correspondences--all should be integral parts of this prereading stage.

The question may come up: when, then, does this readiness stage end? We cannot, alas, give the five or six year old immersion student the five years of language development in the second language with which most children in regular classes come to school. Neither can we expect a child to read a language that he cannot understand or speak. There is also the consideration of basic sound-letter correspondences. Becoming a Nation or Readers speaks to the success rate in reading of children who are taught phonics. Although some immersion languages are alphabetic, like English, there are certainly letter-sound relationships that are different and will be important when formal reading begins.

An aural/oral approach to sound/symbol relationships during the prereading stage through the use of rhymes has worked well in my experience. Children are familiar with the form of rhyme, enjoy reciting rhymes, are quick to learn their sing-song cadence, remember them and pick up orally the sound-letter correspondences being stressed. The teacher provides the link between oral and written language by transcribing the rhymes after the children learn them, putting the lines of the rhymes on sentence strips, making books of the rhymes with students, and "reading" the books in groups or individually. These are certainly not part of a formal reading program but are important steps in developing certain sound-letter relationships and in encouraging positive experiences in reading.

This link between print and talk can also be provided by language experience activities. When children dictate their stories about field trips, books read, animals, etc., and the teacher transcribes these, the beginning immersion students begin to see how the new language "looks"; they feel pride seeing their name in print, they can "read" what they "wrote" and, with teacher direction, they begin to understand that there is a connection between their oral/aural language and a visual representation, written language.

Formal Reading: Teaching of Phonics with Vocabulary Development

Formal reading can begin when beginning immersion students have had extensive opportunities to hear the language in the context of the curriculum; when they are able to tap into their background knowledge and relate it to the concept being learned; when they can begin to negotiate meaning in the second language; when they have been exposed to the written second language and when certain basic sound-letter correspondences have been introduced to them. This may, indeed, take a bit longer than in a native language classroom. The fact that some students enter school reading already in their native language may speed up the decoding process in the second language but if learning to read means comprehending messages, then the time spent in the development of the oral language and vocabulary remains of the utmost importance.

I certainly would agree with the Commission's conclusion about the teaching of phonics. The child in an immersion formal reading program, like his counterpart in a regular classroom, does need to learn the most important and regular sound-letter correspondences of the second language and, then, to use them by reading meaningful text. However, the assumption is made in the report that phonics does not need to enable a child to produce perfect pronunciations but to come up with approximate pronunciations that the child needs to check with words known from spoken language that fit in the context of the story being read. I don't think that immersion teachers can assume that this will happen with our students because of the reduced amount of spoken language that the students have. Thus, immersion teachers of beginning readers need to supplement learning of sound-letter correspondences with learning of vocabulary that uses these correspondences. Some texts for beginning readers may do this if the authors have used a phonic approach. Others do not and it will be the teacher's job to do so. Thus, if the reading selection will be concentrating on a particular phoneme, for example, the {o} in French, the teacher might bring into class a large box wrapped like a birthday present (un cadeau {kado}). Inside the box might be a collection of objects whose names use the phoneme: a small boat (un bateau {bato}), a cake (un gateau {gato}), a picture of someone's back (un dos {do}). Children will see the objects, give their names or learn their names and realize, with teacher direction, that all the objects have the certain phoneme as a unifying factor. If the teacher has included objects in the collection that appear in the story, these words might then be easier to decode for some children. Continuously providing opportunities to develop oral language will also enrich the number of words known with which beginning readers can check approximate pronunciations.

Most of the beginning readers developed for the primary reader that use a phonetic approach start with simple vowel sounds and go into more complex sounds. This approach is logical but it would be interesting to explore which of the vowel sounds occur most frequently in a group of words important for beginning readers to learn to read and then, to teach these correspondences so that children will learn to read text that is important to them and from which they can get a message. This idea, presented in Becoming a Nation of Readers, seems to be an interesting one for immersion as well. While nonsense sentences and those which have no context but use the same sound-letter correspondence might help in advancing word identification skills, they will do little to enable our students to understand a message and bring ideas to mind.

Extending Literacy

Once an appropriate text has been selected, one that children can decode, the immersion teacher needs to exploit to the fullest the before-reading discussions and questioning afterwards. In this way the teacher will discern whether or not the child has enough background knowledge and/or oral language necessary to understand the story and to speak about it. By questioning the teacher can expand this background knowledge and the oral language while perceiving problems in comprehension.

Textbooks and Children's Literature

Two issues particularly challenging to immersion teachers are spoken about the third chapter of the report "Extending Literacy," the issue of the good textbooks and the idea of teaching children strategies for becoming good readers. The textbook issue is particularly critical in the United States immersion programs. Although the last five years have brought greater numbers of material available from Canada and France, these frequently do not correspond to American curriculum needs, particularly in social studies and science. And to teach our children strategies for becoming good readers we do need texts that correspond to the content to be taught. If these are not available, we need to develop texts that do or to supplement what we do have with teacher-made materials.

We have discussed some reasons for which good children's literature is so very important to an immersion classroom: it provides and/or expands background knowledge; it can relate this knowledge to the content being taught; it is a rich source of new vocabulary, both content-related and social; it can help beginning students feel comfortable with the new language. Immersion teachers also need to choose to read stories for their narrative aspects. By discussion, reading and writing about all parts of story structure (plot, setting, characterization, conflict and resolution), immersion students will be using and manipulating language that mirrors real-life and fantasy situations to which they might never be exposed in everyday classroom life.

The final issue with which I, as an immersion teacher, agree completely with the Commission's report is the priority that we should give to independent reading. This becomes particularly important once a child can read in the second language. It is, indeed, the second most important way, after direct instruction, that the child will expand his oral and written facility in the second language.

In conclusion, all the issues in this report are important to immersion teachers as teachers of reading to primary students but several of them need to be looked at in a different way because of our special job as teachers communicating in a second language: the development of oral language skills; the reading readiness stage, the link between oral and written language; the development of vocabulary and the importance of textbooks and good children's literature.

APPENDICES

Science objectives*

Kindergarten:

Students will identify substances by taste.

Students will identify the basic need of green plants.

Grade 1

Students will distinguish objects which will sink from those which will float.

Students will identify examples of living and nonliving components in a balanced aquarium.

Grade 2

Students will identify that sounds are produced using different sources and methods.

Students will demonstrate that changing the position of an object in relation to the light source changes the appearance of its shadow.

Social studies objectives*

Kindergarten

Students will state personal identifying information: name, address, phone, number, birthday and age in years

Students will describe daily classroom jobs that must be done

Grade 1

Students will identify examples of food in each of the four basic food groups

Students will describe the kinds of clothing needed for the four seasons and different kinds of weather

Grade 2

Students will differentiate between specialized areas in the community: residential, recreational and commercial

Students will identify various forms of transportation and communication available in their community

Math objectives*

Kindergarten

Students will use terms which describe the amount in a container: full, not full, empty, almost empty, almost full, etc.

Students will compare and describe weight of two objects on a primary balance (heavier, lighter, same, etc.) with non-standard units

Grade 1

Students will name and informally describe rectangles (including squares), circles, and triangles in various orientations.

Students will weigh and record using non-standard units on a balance

Grade 2

Students will identify shapes which have symmetry (1 or more lines)

Students will use informal surveys to collect data

*Objectives from the Montgomery County Public Schools science, social studies and math curricula.

Definitions of Types of Discourse

Narrative texts - An account of an event or series of events that form a plot and involve characters in a setting over a period of time. Characteristic forms include short stories, novels, folktales, fables, myths, legends, biographies, autobiographies, diaries, journals, ballads, and story poems.

Expository texts - A structured set of ideas and information about a topic, often with generalizations and supporting details. Characteristic forms include encyclopedia articles, news articles, feature articles, textbooks, and expository tradebooks.

Persuasive texts - A set of statements expressing opinion about a topic or product, often with supporting information intended to convince or persuade the reader/listener. Characteristic forms include advertisements, editorials, reviews, and critiques.

Procedural texts - A set of directions that indicate the proper sequence of steps in making or doing something. Characteristic forms include recipes, game directions, signs, warnings, and directions for developing a skill. Also included are directions for travel, first aid, tests, assignments, informational forms, and science investigations.

Instructional Guide in Reading/Language Arts: Reading and Listening
Page 7, Board of Education of Montgomery County, Rockville, Maryland.

Writing Intents

Narrative writing - The focus is primarily on the work itself, as an object worthy of being appreciated in its own right. Some examples of narrative writing are stories, fables, folk tales, novels, story poems, and plays.

Expository writing - The focus is primarily on the subject matter itself, on relaying facts to others. Some examples of informative writing are reports, summaries, answers to essay questions, eye-witness accounts, and news stories. Procedural writing is included in the curriculum as a kind of informative writing.

Procedural writing - See expository writing.

Persuasive writing - The focus is primarily on achieving some practical effect on, or change the opinion of others. Some examples of persuasive writing are advertisements, commercials, letters-to-the-editor, and editorials.

Note: In any piece of writing these intents will overlap. For example, an advertisement may be informative as well as persuasive. In persuading someone to buy a product, the writer includes information about that product. Similarly, literary forms which primarily tell a story may contain expressive, informative, and persuasive elements. These intents may be separated in the curriculum for both theoretical and practical reasons and serve as a framework for clustering the objectives in writing.

Instructional Guide in Reading/Language Arts: Writing and Speaking, Page 1, Board of Education of Montgomery County , Rockville, Maryland.

BIBLIOGRAPHY

BIBLIOGRAPHY

California State Department of Education, Bilingual Education Office. Studies on Immersion Education: A Collection for United States Educators. Los Angeles, CA: California State University, Evaluation, Dissemination, and Assessment Center, 1984.

Cummins, James. Bilingualism and Special Education: Issues in Assessment and Pedagogy. Clevedon, England: Multilingual Matters, 1984.

Curtain, Helena A., and Carol Ann Pesola. Languages and Children--Making the Match. Reading, MA: Addison-Wesley Pub. Co., 1988.

Genesee, Fred. "Second Language Learning Through Immersion: A Review of U.S. Programs." Review of Educational Research 55 no. 4 (Winter 1985): 541-61 .

________. Learning Through Two Languages. Rowley, MA: Newbury House, 1987.

Kagan, Spencer. Cooperative Learning Resources for Teachers. Riverside, CA: University of California, 1987.

Krashen, Stephen. Second Language Acquisition and Second Language Learning. Oxford, England: Pergamon Press, 1981.

________. Inquiries & Insights. Hayward, CA: Janus Book Publishers, Inc., 1985.

Lambert, Wallace E., and G. Richard Tucker. Bilingual Education of Children, The St. Lambert Experiment. Rowley, MA: Newbury House, 1972.

Lapkin, Sharon, Merrill Swain, and Valerie Argue. French Immersion: The Trial Balloon that Flew. The Ontario Institute for Studies in Education and Canadian Parents for French, 1983.

Long, Michael H., and Patricia A. Porter. "Group Work, Interlanguage Talk, and Second Language Acquisition." TESOL Quarterly 19, no. 2 (1985): 207-227.

Met, Myriam, Helena Anderson, Evelyn Brega, and Nancy Rhodes. "Elementary School Foreign Language: Key Links in the Chain of Learning." In Foreign Languages: Key Links in the Chain of Learning, ed. Robert G. Mead, 10-24. Middlebury, VT: Northeast Conference on the Teaching of Foreign Languages, 1983.

Met, Myriam. "Decisions! Decisions! Decisions! Foreign Language in the Elementary School." Foreign Language Annals 18, no. 6 (1985): 469-473.

________. "Twenty Questions: The Most Commonly Asked Questions About Starting an Immersion Program." Foreign Language Annals 20, no. 4 (1987): 311-315.

Saville-Trocke, Muriel. "Dilingual Discourse: The Negotiation of Meaning Without a Common Code." Linguistics, 25 (19487), 81-100.

Schinke-Llano, Linda. Foreign Language in the Elementary School: State of the Art. Washington, D.C.: Center for Applied Linguistics, 1986.

Snow, Marguerite Ann. Immersion Teacher Handbook. Los Angeles, CA: Center for Language Education and Research, University of California, 1987.

Swain, Merrill and Sharon Lapkin. Evaluating Bilingual Education: A Canadian Case Study. Clevedon, England: Multilingual Matters, 1985.

________. "Immersion French in Secondary Schools: 'The goods' and 'The bads' ." Contact, 5 (1986), no. 3, 2-9.

Weber, Sandra and Claudia Tardif. "What Did She Say? Meaning In a Second Language Classroom." Faculté Saint-Jean, University of Alberta. Paper presented at the April, 1987 meeting of the American Educational Research Association, Washington, D.C.

Wells, Gordon. The Meaning Makers: Children Learning Language and Using Language to Learn. Portsmouth, NH: Heineman, 1986.

Wong-Fillmore, L. "The Second Time Around: Cognitive and Social Structures in Second Language Acquisition." Ph.D. dissertation, University of California, Berkeley, 1976.